

TSD File Inventory Index

Date: March 2, 2000

Initial: CMK/mw

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Facility Identification Number: <u>OHD 004 167 219</u>	
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A.2 Part A / Interim Status	.1 Correspondence
.1 Correspondence	.2 All Other Permitting Documents (Not Part of the ARA)
.2 Notification and Acknowledgment	C.1 Compliance - (Inspection Reports)
.3 Part A Application and Amendments	C.2 Compliance/Enforcement
.4 Financial Insurance (Sudden, Non Sudden)	.1 Land Disposal Restriction Notifications
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.1 Correspondence	.2 RFI Workplan
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.4 CMI Draft/Final Reports		.8 Endangered Species Act	
.5 CMI QAPP		.9 Environmental Justice	

Note: Transmittal Letter to Be Included with Reports.

Comments: Documents do not justify individual folders per schedule.



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

*File in
part A
file*

November 29, 1991

Re: National Electric Carbon Corp.
(FKA) Union Carbide Corp.
US EPA ID No.: **OHD004167219**
Ohio ID No.: 03-74-0385
Amended Closure Plan

National Electric Carbon Corp.
Attn: Mr. R.L. Johnson
PO Box J
Fostoria, Ohio 44830

Dear Mr. Johnson:

A public notice acknowledging the Ohio EPA's receipt of an amended closure plan for National Electric Carbon Corporation (FKA) Union Carbide Corp. located at 200 North Street, Fostoria, Ohio 44830 will appear the week of December 2, 1991 in The Advertiser Tribune, Tiffin, Ohio. The Director of the Ohio EPA will act upon the closure plan request following the close of the public comment period, January 8, 1992.

Copies of the plan will be available for public review at the Tiffin-Seneca Public Library, 77 Jefferson Street, Tiffin, Ohio 44883 and the Ohio EPA, Northwest District Office, 347 N. Dunbridge Road, Bowling Green, Ohio 43402.

Please contact Randy Sheldon at (614) 644-2977, if you have any questions concerning this matter.

Very truly yours,

Thomas E. Crepeau, Manager
Data Management Section
Division of Hazardous Waste Management

TC/rs/closurereceipt

cc: **Lisa Pierard, U.S. EPA, Region V**
Randy Meyer, Ohio EPA, DHWM, RCRA TAS
Jeff Steers, Ohio EPA, NWDO



PUBLIC NOTICE

Seneca County

RECEIPT OF AMENDED HAZARDOUS WASTE CLOSURE PLAN

For: National Electric Carbon Corporation (FKA) Union Carbide Corp., 200 North Street, Fostoria, Ohio 44830, mailing address: PO Box J, Fostoria, Ohio 44830, US EPA ID No.: OHD004167219, Ohio ID No.: 03-74-0385. Pursuant to OAC Rule 3745-66-10 thru 17 and 40 CFR, Subpart G, 265.110 thru 117, the Ohio Environmental Protection Agency (Ohio EPA) is hereby giving notice of the receipt of an Amended Hazardous Waste Facility Closure Plan involving a former Hazardous Waste Drum Storage Area for the above referenced facility. Ohio EPA is also giving notice that this facility is subject to a determination concerning corrective action, a requirement under the Hazardous and Solid Waste Amendments of 1984, which concerns any possible uncorrected releases of hazardous waste or hazardous constituents to the environment from any current or previous solid waste management units at the above facility. A corrective action determination is required from hazardous waste facilities intending to close.

Copies of the facility's Amended Closure Plan will be available for public review at the Tiffin-Seneca Public Library, 77 Jefferson Street, Tiffin, Ohio 44883 and the Ohio EPA, Northwest District Office, 347 N. Dunbridge Road, Bowling Green, Ohio 43402. Comments concerning this plan or factual information concerning any releases of hazardous waste or hazardous waste constituents by the above facility requiring corrective action should be submitted within 30 days of this notice to: Ohio Environmental Protection Agency, Div. of Hazardous Waste Mgmt., Data Management Section, Attn: Thomas E. Crepeau, Box 1049, Columbus, Ohio 43266-0149.



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020 Fax (614) 644-2329

Richard F. Celeste
Governor

File
in
Part A

November 29, 1990

Re: National Electric Carbon Corp.
U.S. EPA ID No.: OHD004167219
Closure Plan Amendment

National Electric Carbon Corporation
Attn: Mr. Michael Wentzel
200 N. Town Street
Fostoria, Ohio 44830

Dear Mr. Wentzel:

A public notice acknowledging the Ohio EPA's receipt of an amendment to the closure plan for National Electric Carbon Corporation located at 200 N. Town Street, Fostoria, Ohio will appear the week of December 3, 1990, in The Advertiser Tribune, Tiffin, Ohio. The Director of the Ohio EPA will act upon the closure plan request following the close of the public comment period, January 9, 1991.

Copies of the closure plan amendment will be available for public review at the Tiffin-Seneca Public Library, 77 Jefferson Street, Tiffin, Ohio 44883 and the Ohio EPA, Northwest District Office, 1035 Devlac Grove Drive, Bowling Green, Ohio 43402.

I may be contacted at (614) 644-2977 if you have any questions concerning this matter.

Very truly yours,

Thomas E. Crepeau

Thomas E. Crepeau, Manager
Data Management Section
Division of Solid & Hazardous Waste Management

TEC/dhs

cc: Lisa Pierard, U.S. EPA, Region V
Randy Meyer, Ohio EPA, DSHWM, RCRA TAS
Jeff Steers, Ohio EPA, DSHWM, NWDO

2556R(17)

PUBLIC NOTICE

Seneca County

RECEIPT OF AN AMENDMENT TO A HAZARDOUS WASTE CLOSURE PLAN

For: National Electric Carbon Corporation, 200 N. Town Street, Fostoria, Ohio 44830, U.S. EPA ID No.: OHD004167219. Pursuant to OAC Rule 3745-66-10 thru 17 and 40 CFR, Subpart G, 265.110 thru 117, the Ohio Environmental Protection Agency (Ohio EPA) is hereby giving notice of the receipt of an Amendment to a Hazardous Waste Facility Closure Plan for a Former Hazardous Waste Drum Holding Area for the above referenced facility. Ohio EPA is also giving notice that this facility is subject to a determination concerning corrective action, a requirement under the Hazardous and Solid Waste Amendments of 1984, which concerns any possible uncorrected releases of hazardous waste or hazardous constituents to the environment from any current or previous solid waste management units at the above facility. A corrective action determination is required from hazardous waste facilities intending to close.

Copies of the facility's Closure Plan Amendment will be available for public review at the Tiffin-Seneca Public Library, 77 Jefferson Street, Tiffin, Ohio 44883 and the Ohio EPA, Northwest District Office, 1035 Devlac Grove Drive, Bowling Green, Ohio 43402. Comments concerning the Closure Plan Amendment or factual information concerning any releases of hazardous waste or hazardous waste constituents by the above facility requiring corrective action should be submitted within 30 days of this notice to: Ohio Environmental Protection Agency, Div. of Solid & Hazardous Waste Mgmt., Data Management Section, Attn: Thomas E. Crepeau, Box 1049, Columbus, Ohio 43266-0149.



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

RECEIVED
WMD RECORD CENTER

JUN 23 1994

George V. Voinovich
Governor

April 15, 1991

National Electrical Carbon Corp.
Attn: Robert M. Wentzel
P. O. Box J
Fostoria, OH 44830

RE: EPA ID#: OHD004167219

In response to your request of 3/1/91 the
following information has been updated:

Name: National Electrical Carbon Corp.

Contact: Robert M. Wentzel

Owner: Morgan Crucible Co. Plc.

? → Status: No longer a treater, storer, or disposer

Deleted Waste Codes: D003, F002, F007, F008, F009, F017, U002, U013, U032, U044,
U112, U134, U151, U154, U165, U211, U220, U228, U239

Added Codes: D040, D009, D011

If you have any questions, please contact Beth Harris at
(614) 644-2977.

Sincerely,

Thomas E. Crepeau
Thomas E. Crepeau, Manager
Data Management Section
Division of Solid & Hazardous Waste

TEC/bah

cc: U.S. EPA, Region V



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

APR 22 1982

REPLY TO ATTENTION OF:
RCRA ACTIVITIES

William Glasgow, Chief Plant Engineer
Union Carbide Corporation - Carbon Products Division
P.O. Box J
Fostoria, Ohio 44830

RE: Interim Status Acknowledgement USEPA ID No. OHD 004 167 219
FACILITY NAME: UNION CARBIDE CORP CARBON PRODUCTS DIV

Dear Mr. Glasgow:

This is to acknowledge that the U.S. Environmental Protection Agency (USEPA) has completed processing your Part A Hazardous Waste Permit Application. It is the opinion of this office that the information submitted is complete and that you, as an owner or operator of a hazardous waste management facility, have met the requirements of Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) for Interim Status. However, should USEPA obtain information which indicates that your application was incomplete or inaccurate, you may be requested to provide further documentation of your claim for Interim Status. Our opinion will be reevaluated on the basis of this information.

As an owner or operator of a hazardous waste management facility, you are required to comply with the interim status standards as prescribed in 40 CFR Parts 122 and 265, or with State rules and regulations in those States which have been authorized under Section 3006 of RCRA. In addition, you are reminded that operating under interim status does not relieve you from the need to comply with all applicable State and local requirements.

The printout enclosed with this letter identifies the limit(s) of the process design capacities your facility may use during the interim status period. This information was obtained from your Part A Permit application. If you wish to handle new wastes, to change processes, to increase the design capacity of existing processes, or to change ownership or operational control of the facility, you may do so only as provided in 40 CFR Sections 122.22 and 122.23.

As stated in the first paragraph of this letter, you have met the requirements of 40 CFR Part 122.23; your facility may operate under interim status until such time as a permit is issued or denied. This will be preceded by a request from this office or the State (if authorized) for Part B of your application. Please contact Arthur Kawatachi of my staff at (312) 886-7449, if you have any questions concerning this letter or the enclosure.

Sincerely yours,


Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Enclosure

cc: R. G. Russel, V.P. - Gen. Man.

09/29/81

INSTALLATION ADDRESS

200 NORTH ST
FOSTORIA

OH

44830

EPA I.D. NUMBER

0HD004167219

REACKNOWLEDGEMENT

UNION CARBIDE CORP. CARBON PRODUCTS DIV
PO BOX J
FOSTORIA
OH 44830

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

ACKNOWLEDGEMENT OF NOTIFICATION
OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)



ENVIRONMENTAL PROTECTION AGENCY
NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

I. INSTALLATION'S EPA I.D. NO.
II. NAME OF INSTALLATION
III. LOCATION OF INSTALLATION

040004167219

PLEASE PLACE LABEL IN THIS SPACE

001

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored, and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law (Section 3010 of the Resource Conservation and Recovery Act).

FOR OFFICIAL USE ONLY

COMMENTS	
C	
15 16	
INSTALLATION'S EPA I.D. NUMBER	APPROVED
040004167219	A
DATE RECEIVED (yr., mo., & day)	800818
1 2	13 14 15
16	17 18 19 20 21 22

I. NAME OF INSTALLATION

UNION CARBIDE CORP CARBON PRODUCTS

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX	
3 PO BOX J	
15 16	
CITY OR TOWN	
4 FOSTORIA	
15 16	
ST.	ZIP CODE
OH	44830
40 41 42 43	44 45 46 47 48 49 50 51

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER	
5 200 NORTH TOWN ST	
15 16	
CITY OR TOWN	
6 FOSTORIA	
15 16	
ST.	ZIP CODE
OH	44830
40 41 42 43	44 45 46 47 48 49 50 51

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title)		PHONE NO. (area code & no.)	
2 GLASGOW WA CHIEF PLANT ENGR		419-435-8181	
15 16		43 44 45 46 47 48 49 50 51 52 53 54 55	

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER	
8 UNION CARBIDE CORPORATION	
15 16	
B. TYPE OF OWNERSHIP (enter the appropriate letter into box)	VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))
F = FEDERAL M = NON-FEDERAL	<input checked="" type="checkbox"/> A. GENERATION <input checked="" type="checkbox"/> C. TREAT/STORE/DISPOSE
M	<input type="checkbox"/> B. TRANSPORTATION (complete item VII) <input type="checkbox"/> D. UNDERGROUND INJECTION
36	57 58 59 60

VII. MODE OF TRANSPORTATION (transporters only - enter "X" in the appropriate box(es))

<input type="checkbox"/> A. AIR	<input type="checkbox"/> B. RAIL	<input type="checkbox"/> C. HIGHWAY	<input type="checkbox"/> D. WATER	<input type="checkbox"/> E. OTHER (specify):
61	62	63	64	65

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

<input checked="" type="checkbox"/> A. FIRST NOTIFICATION	<input type="checkbox"/> B. SUBSEQUENT NOTIFICATION (complete item C)
---	---

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

C. INSTALLATION'S EPA I.D. NO.

040004167219

AUG 18 1980

5	W	0	H	0	0	4	1	6	7	2	1	9	2
1	2	3	4	5	6	7	8	9	10	11	12	13	14

IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front)

A. HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from non-specific sources your installation handles. Use additional sheets if necessary.

1 F 0 0 1 23 - 26	2 F 0 0 2 23 - 26	3 F 0 0 7 23 - 26	4 F 0 0 8 23 - 26	5 F 0 0 9 23 - 26	6 F 0 1 7 23 - 26
7	8	9	10	11	12
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

NONE	13	14	15	16	17	18
	19	20	21	22	23	24
	25	26	27	28	29	30
	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31 U 0 0 2 23 - 26	32 U 0 1 3 23 - 26	33 U 0 3 2 23 - 26	34 U 2 1 1 23 - 26	35 U 0 4 4 23 - 26	36 U 1 1 2 23 - 26
37 U 1 2 5 23 - 26	38 U 1 3 4 23 - 26	39 U 1 5 1 23 - 26	40 U 1 5 4 23 - 26	41 U 2 2 0 23 - 26	42 U 2 2 8 23 - 26
43 U 2 3 9 23 - 26	44 U 1 6 5 23 - 26	45	46	47	48
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26

D. LISTED INFECTIOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

NONE	49	50	51	52	53	54
	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26

E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed hazardous wastes your installation handles. (See 40 CFR Parts 261.21 - 261.24.)

☒ 1. IGNITABLE
(D001)

☒ 2. CORROSIVE
(D002)

☒ 3. REACTIVE
(D003)

☒ 4. TOXIC
(D000)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE <i>George A. Hamm</i>	NAME & OFFICIAL TITLE (type or print) George A. Hamm, Plant Manager	DATE SIGNED 8-14-80
------------------------------------	--	------------------------



UNION CARBIDE CORPORATION
CARBON PRODUCTS DIVISION

P.O. BOX J, FOSTORIA, OHIO 44830

August 14, 1980

EPA Region V
RCRA Activities
P. O. Box 7861
Chicago, Illinois 60680

Gentlemen:

Attached is the "Notification of Hazardous Waste Activity" form required by the USEPA for the Fostoria, Ohio location of Union Carbide Corporation, Carbon Products Division. Please note that to date, no EPA identification number has been assigned to this location.

Since further information on these hazardous waste activities will be required to be submitted by November 19, 1980, we are hereby requesting RCRA Part A Permit Applications, specifically forms 1 and 3 of the EPA Consolidated Permit Regulations, along with any information concerning the completion of these forms.

Very truly yours,

A handwritten signature in dark ink, appearing to read "W.A. Glasgow", written over a horizontal line.

W.A. Glasgow
Chief Plant Engineer

:mic
att.

CC: D.A. Mieskowski - Parma

WTA

OHD 004 167 219



UCAR CARBON COMPANY INC.

Parma Technical Center

12900 SNOW ROAD, PARMA, OHIO

MAIL ADDRESS: P. O. BOX 6116, CLEVELAND, OH 44101

bcc: K. G. Narwold
Danbury E2

Ms. Sharon Kiddon
USEPA Region V

February 22, 1991

Ms. Rhonda Rothschild
Ohio EPA
DSHWM
P. O. Box 1049
Columbus, OH 43266-0149

RECEIVED
FEB 27 1991

OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Dear Ms. Rothschild:

Per our phone conversation today, you confirmed that your records show the storage facility at 200 North Town Street, Fostoria, Ohio, 44830, US EPA Id. No. OHD004167219, Ohio Permit No. 03-74-0385 belonging to Union Carbide Corporation. This facility was sold to National Electrical Carbon Corporation in 1986. Please find attached a copy of correspondence to Mr. Crepeau on December 10, 1986, requesting transfer of the permit to National Electrical Carbon Corporation.

Mr. Michael Wentzel at the Fostoria facility indicates that all his correspondence from Ohio EPA is addressed to National Electrical Carbon Corporation and Mrs. Thornton, USEPA, Region V indicates her correspondence files show the same. However, Region V has no Notification Form on file showing the change and their official list still shows the facility belonging to Union Carbide.

My understanding from our conversation today is that you will send Mr. Wentzel a Notification Form and a Part A Application. He will complete the Notification showing the change in ownership and return it to you. The requirement for completion of the Part A will be left up to the Ohio EPA authority handling his closure plan. I also understand that EPA Region V's records will be updated once you have the Notification.

If you have any questions, please call me at (216) 676-2304. I would appreciate receiving confirmation of the transfer of ownership from you.

Sincerely,

A handwritten signature in cursive script, reading "D. A. Mieskowski".

D. A. Mieskowski
Staff Administrator
Environmental Protection

Attachment

cc: M. Wentzel/Ohio EPA

DAM/jkm/3278D

UNION CARBIDE CORPORATION 39 OLD RIDGEBURY ROAD, DANBURY, CT 06817-0001
LAW DEPARTMENT

December 10, 1986

Mr. Tom Crepeau:
Ohio EPA, Division of Hazardous Material
361 East Broad Street
Columbus, Ohio 43215

Re: Hazardous Waste Storage Facility and
Installation Permit Transfer

Dear Mr. Crepeau:

Union Carbide Corporation (Union Carbide) will complete the transfer of the assets at its Fostoria, Ohio facility to National Electrical Carbon Corporation on or about December 11, 1986. National Electrical Carbon Corporation has assumed certain costs and responsibilities regarding the environment, including permit responsibilities. Therefore, the parties are requesting the transfer of the Hazardous Waste Storage Facility Installation and Operation Permit No. 03-74-0385 from Union Carbide to National Electrical Carbon Corporation as soon as practicable. We understand that the facility may continue to operate under this permit pending completion of the transfer procedures.

The facility is endeavoring to achieve only generator status and has recently submitted a letter (Nov. 20, 1986) expressing this intent. The asset sale does not affect this commitment.

If you have any questions or comments regarding this correspondence, please refer them to:

Michael Wentzel
Administrator, H.S.E.A.
Union Carbide Corporation
P.O. Box J
Fostoria, OH 44830


Mr. Wentzel can be reached at 419 435-1323. We would appreciate any actions you may take to expedite these transfer proceedings.

Very truly yours,



Union Carbide Corporation

Attorney in Fact


National Electrical Carbon Corporation

Attorney in Fact

cc: M. Wentzel
R.G. Tisch



State of Ohio Environmental Protection Agency

P.O. Box 1049, 361 E. Broad Street
Columbus, Ohio 43266-1049
514) 466-8565

Richard F. Celeste
Governor

October 29, 1986

Re: Permit Withdrawal Request
Union Carbide Corporation
US EPA ID No.: OHD004167219
Ohio Permit No.: 03-74-0385

Union Carbide Corporation
Attn: Thomas J. Kramb
200 North Town Street
Fostoria, Ohio 44830

Dear Sir:

Your facility has notified Ohio EPA that you no longer intend to pursue your Hazardous Waste Installation & Operation Permit.

In order to finalize your withdrawal request, the following information should be forwarded to us within thirty (30) days:

1. A formal request for withdrawal signed by an authorized representative according to Rule 3745-50-42(A)-(D) of the Ohio Administrative Code (Attachment 1) including a full explanation of your reasons for withdrawal of your application.
2. A certification statement signed by the same authorized representative of your facility (Attachment 2).

Upon receipt of the above items, Ohio EPA will review your submission along with any facility inspection report(s). If no additional information is necessary, your permit withdrawal request will be finalized.

Please forward the above information to: Ohio EPA, Division of Solid & Hazardous Waste Management, Attn: Thomas E. Crepeau, Program Planning and Management Section, 361 East Broad Street, P.O. Box 1049, Columbus, Ohio 43216-1049.

Please note that you must also notify US EPA of your change in status if you have not already done so.

Should you have further questions concerning this procedure, please call James Flautt, Program Planning and Management Section, at (614) 462-6781.

Very truly yours,

Thomas E. Crepeau

Thomas E. Crepeau
Program Planning and Management Section
Division of Solid & Hazardous Waste Management

Enclosures

cc: George Hamper/Rebecca Strom, US EPA, Region V Paul Kalter, NWDO

1616R(5)

RECEIVED

OCT 31 1986

U.S. EPA, REGION V

FORM 1 GENERAL	 U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>	I. EPA I.D. NUMBER <div style="border: 1px solid black; padding: 2px;"> F O H D / 0 0 4 1 6 7 2 1 9 3 D </div>																																																						
II. POLLUTANT CHARACTERISTICS <p>INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">SPECIFIC QUESTIONS</th> <th colspan="3">MARK 'X'</th> <th rowspan="2">SPECIFIC QUESTIONS</th> <th colspan="3">MARK 'X'</th> </tr> <tr> <th>YES</th> <th>NO</th> <th>FORM ATTACHED</th> <th>YES</th> <th>NO</th> <th>FORM ATTACHED</th> </tr> </thead> <tbody> <tr> <td>A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)</td> <td></td> <td>X</td> <td></td> <td>B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)</td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)</td> <td></td> <td>X</td> <td></td> <td>D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)</td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)</td> <td>X</td> <td></td> <td></td> <td>F. 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Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.</p>
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CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST										B. SECOND									
7	3	6	2	4	(specify)	CARBON & GRAPHITE PRODUCTS	7				(specify)								
C. THIRD										D. FOURTH									
7					(specify)		7				(specify)								

VIII. OPERATOR INFORMATION

A. NAME															B. Is the name listed in Item VIII-A also the owner?																				
8	U	N	I	O	N	C	A	R	B	I	D	E	C	O	R	P	.	C	A	R	B	O	N	P	R	O	D	U	C	T	S	D	I	V	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)															D. PHONE (area code & no.)																				
F = FEDERAL M = PUBLIC (other than federal or state) P = PRIVATE S = STATE O = OTHER (specify) P (specify)															A 4 1 9 4 3 5 8 1 8 1																				
E. STREET OR P.O. BOX																																			
P.O. BOX J																																			
F. CITY OR TOWN															G. STATE					H. ZIP CODE					IX. INDIAN LAND										
B F O S T O R I A															O H					4 4 8 3 0					Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO										

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)										D. PSD (Air Emissions from Proposed Sources)									
9	N									9	P								
B. UIC (Underground Injection of Fluids)										E. OTHER (specify)									
9	U									9									
C. RCRA (Hazardous Wastes)										E. OTHER (specify)									
9	R									9									

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

Attachment II

XII. NATURE OF BUSINESS (provide a brief description)

Manufacturing plant for production of a broad range of carbon and graphite products, including battery electrodes, arc carbons, brush blocks, and flexible carbon and graphite cloth.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)		B. SIGNATURE		C. DATE SIGNED	
Vice President & General Manager R. G. Russel				11/17/80	

COMMENTS FOR OFFICIAL USE ONLY

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

FORM 3 RCRA
EPA
U.S. ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS WASTE PERMIT APPLICATION
Consolidated Permits Program
(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER
F 0 H D 0 0 4 1 6 7 2 1 9 3 1

FOR OFFICIAL USE ONLY

APPLICATION APPROVED
DATE RECEIVED (yr., mo., & day)
23 24 25

COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION (place an "X" below and provide the appropriate date)

☒ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

☐ 2. NEW FACILITY (Complete item below.)

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

B. REVISED APPLICATION (place an "X" below and complete item I above)

☐ 1. FACILITY HAS INTERIM STATUS

☐ 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES - CODES AND DESIGN CAPACITIES

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.

1. AMOUNT - Enter the amount.

2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

Storage:
CONTAINER (barrel, drum, etc.) S01 GALLONS OR LITERS
TANK S02 GALLONS OR LITERS
WASTE PILE S03 CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT S04 GALLONS OR LITERS

Disposal:
INJECTION WELL D79 GALLONS OR LITERS
LANDFILL D80 ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER
LAND APPLICATION D81 ACRES OR HECTARES
OCEAN DISPOSAL D82 GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT D83 GALLONS OR LITERS

Treatment:
TANK T01 GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT T02 GALLONS PER DAY OR LITERS PER DAY
INCINERATOR T03 TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.) T04 GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE
GALLONS G
LITERS L
CUBIC YARDS Y
CUBIC METERS C
GALLONS PER DAY U

UNIT OF MEASURE
LITERS PER DAY V
TONS PER HOUR D
METRIC TONS PER HOUR W
GALLONS PER HOUR E
LITERS PER HOUR H

UNIT OF MEASURE
ACRE-FEET A
HECTARE-METER F
ACRES B
HECTARES Q

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

S T/A C									
C DUP 1									
1 2 3 4 5 6 7 8 9 10									
LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
		1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)				1. AMOUNT	2. UNIT OF MEASURE (enter code)	
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	8800	G		7				
2					8				
3					9				
4					10				

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

* *DENOTES MAXIMUM DESIGN CAPACITY

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE CODE
POUNDS P
TONS T

METRIC UNIT OF MEASURE CODE
KILOGRAMS K
METRIC TONS M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES**1. PROCESS CODES:**

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

EPA I.D. NUMBER (enter from page 1)													FOR OFFICIAL USE ONLY												
W 0 H D 0 0 4 1 6 7 2 1 9 3 1													W DUP 32 DUP												
V. DESCRIPTION OF HAZARDOUS WASTES (continued)																									
NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES																					
				1. PROCESS CODES (enter)								2. PROCESS DESCRIPTION (if a code is not entered in D(1))													
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
1	U 0 0 2	10,000 lbs	P	S	0	1																			
2	U 0 1 3	100 lbs	P	S	0	1																			
3	U 2 1 1	10 lbs	P	S	0	1																			
4	U 1 2 5	10 lbs	P	S	0	1																			
5	U 2 2 0	50 lbs	P	S	0	1																			
6	U 2 2 8	50 lbs	P	S	0	1																			
7	U 2 3 9	50 lbs	P	S	0	1																			
8	F 0 0 1	22,000 lbs	P	S	0	1																			
9	F 0 0 2	54,000 lbs	P	S	0	1																			
10	F 0 0 8	9,000 lbs	P	S	0	1																			
11	D 0 0 1	500 lbs	P	S	0	1																			
12	D 0 0 2	50 lbs	P	S	0	1																			
13	D 0 0 8	10,000 lbs	P	S	0	1																			
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)**E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.**

EPA I.D. NO. (enter from page 1)												
5	4	3	2	1	0	9	8	7	6	5	4	3
F	O	H	D	0	0	4	1	6	7	2	1	9
1	2	3	4	5	6	7	8	9	10	11	12	13

F6A/55

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

F6A/56

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes & seconds)										LONGITUDE (degrees, minutes & seconds)											
41	09	34	0	8	3	2	4	0	0	6	083	24	06	0	4	1	0	9	0	3	4
65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	

VIII. FACILITY OWNER

☒ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER										2. PHONE NO. (area code & no.)									
E																			
3. STREET OR P.O. BOX										4. CITY OR TOWN									
F										G									
5. ST.										6. ZIP CODE									
15 16										40 41 42 43 44 45 46 47 48 49									

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
R. G. Russel Vice President & General Manager	<i>R. G. Russel</i>	11/17/80

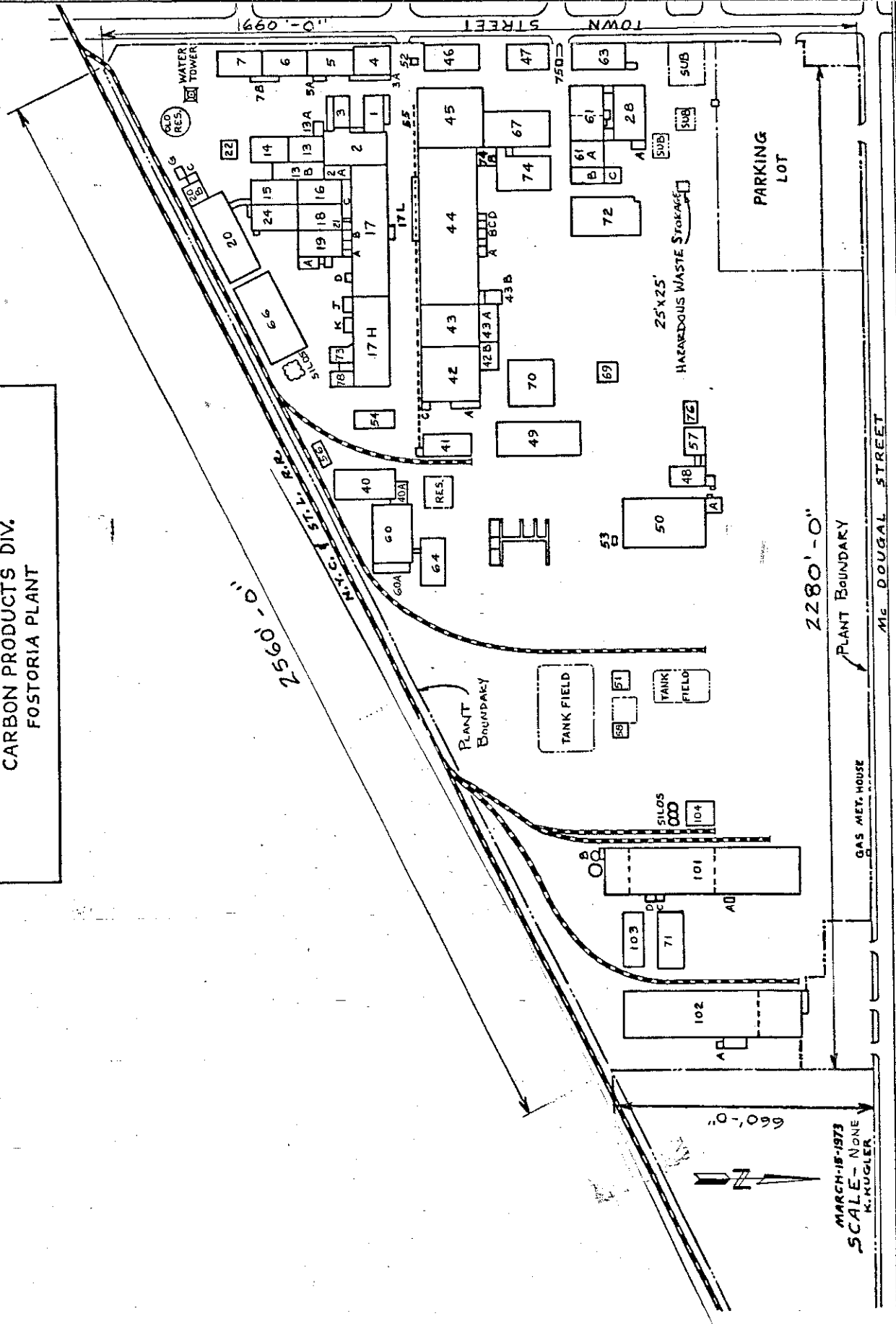
X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED

V. FACILITY DRAWING (see page 4)

UNION CARBIDE CORPORATION
CARBON PRODUCTS DIV.
FOSTORIA PLANT





UNION CARBIDE CORPORATION
CARBON PRODUCTS DIVISION

270 PARK AVENUE, NEW YORK, N. Y. 10017

207

November 18, 1980

EPA Region V
RCRA Activities
P. O. Box 7861
Chicago, Illinois 60680

Gentlemen:

Please find attached a Federal Permit Application for Hazardous Waste Management pursuant to the U.S. Environmental Protection Agency's Consolidated Permit Regulations and the Resource Conservation and Recovery Act of 1976 from the Fostoria, Ohio Facility of Union Carbide Corporation, Carbon Products Division.

A facility map, as called for in Item XI of Form 1, is included. Indicating the location of stormwater discharges was not considered to be required. We are currently investigating this further and if our interpretation proves incorrect, we will submit an amended map showing stormwater discharges at an early date.

The Fostoria Plant submitted the "Notification of Hazardous Waste Activity" forms required by the USEPA on August 14, 1980.

Very truly yours,

R. G. Russel
Vice President & General Manager

RGR:dgh

Att.

ATTACHMENT I

The following are all of the existing permits issued to the Union Carbide Corporation, Fostoria, Ohio Plant by the Ohio Environmental Protection Agency:

207

A. Permit Status

0374010109-P003	0374010109-P030	0374010109-P050
P004	P031	P051
P008	P032	P052
P009	P039	P053
P011	P040	P054
P012	P041	P057
P013	P042	P058
P026	P046	B005
P029	P048	

B. Registration Status

0374010109-P002	0374010109-P025	0374010109-P063
P005	P027	P064
P006	P028	P065
P007	P035	P066
P010	P036	P067
P014	P037	P068
P015	P043	P069
P016	P044	P070
P017	P045	P071
P018	P047	P072
P019	P049	P073
P020	P055	P074
P021	P059	B001
P022	P060	B002
P023	P061	N001
P024	P062	

UNION CARBIDE
Fostoria, Ohio



25 FT X 25 FT HAZARDOUS WASTE
207 STORAGE AREA OH0004167219



State of Ohio Environmental Protection Agency

STREET ADDRESS:

1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

OHD 004 167 219

March 29, 1995

Mr. Kevin Pierard, Chief
U.S. EPA, Region V
Ohio-Minnesota Technical Enforcement Section
Hazardous Waste Enforcement Branch, 5HS-12
77 West Jackson Boulevard
Chicago, Illinois 60604

RECEIVED

MAR 31 1995

OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA, REGION V

Dear Mr. Pierard:

Please find enclosed the final CME for National Electric Carbon Corporation. This document, submitted in partial fulfillment of the 1995 RCRA grant commitment for the second quarter, is based on a site inspection conducted on December 12, 1994. This document was prepared by George Stuckey of the Division of Drinking and Ground Waters, Northwest District Office of the Ohio EPA, with the assistance of Melissa Winzeler of the Division of Hazardous Waste Management, Northwest District Office.

If you have any questions, please contact me at (614) 644-2905.

Sincerely,

Thomas Allen, Assistant Chief
Division of Drinking and Ground Waters

TA/KC/dr
COVER.CME

pc: Gordon Garcia, Project Officer, U.S. EPA, Region V
John Sadzewicz, Chief, DDAGW
Pam Allen, Manager, DHWM-CO (w/enclosure)
Tom Crepeau, Manager, DHWM-CO (w/enclosure)
Chuck Hull, Manager, DHWM-NWDO (w/enclosure)
Tim Fishbaugh, Supervisor, DDAGW-NWDO (w/enclosure)
Laurie Stevenson, Supervisor, DHWM-CO
Katie Crowell, Hydrogeologist, DDAGW-CO
George Stuckey, Hydrogeologist, DDAGW-NWDO
Melissa Winzeler, Environmental Scientist, DHWM-NWDO
File

COMPREHENSIVE GROUND WATER MONITORING EVALUATION

OF

NATIONAL ELECTRICAL CARBON CORPORATION

SENECA COUNTY, OHIO

OHDO04167219

OHIO ENVIRONMENTAL PROTECTION AGENCY

MARCH 31, 1994

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I. GENERAL INFORMATION

Purpose

This report documents the results of a Comprehensive Ground Water Monitoring Evaluation (CME) conducted at the National Electrical Carbon Corporation (NECC) located in Fostoria, Ohio. The objective of a CME is to determine whether the owner/operator has, in-place, a ground water monitoring system that is adequately designed, operated and maintained to detect releases to or define the rate and extent of contaminant migration from a regulated unit as required by Rules 3745-65-90 through 3745-65-94 and 3745-65-75 of the Ohio Administrative Code (OAC). The period of compliance under evaluation for this CME is from the initial date of closure activities to December 12, 1994.

Information Sources

This report is based upon an extensive record review and a site inspection conducted at the facility on December 12, 1994. The purpose of the inspection was to observe and determine the adequacy of the ground water sampling procedures, obtain ground water surface elevations, verify monitoring well locations, evaluate the physical integrity of the monitoring wells, and review all written records pertaining to the ground water monitoring system. The site inspection was conducted by George Stuckey, author of this report, Division of Drinking and Ground Waters, Northwest District Office, (NWDO) Ohio EPA; Katie Crowell, Division of Drinking and Ground Waters, Central Office, Ohio EPA; and Melissa Winzeler, Division of Hazardous Waste Management, Northwest District Office, Ohio EPA. Representing National Electrical Carbon Corporation during the inspection was, R. Michael Wentzel, Manager, Health, Safety, and Environmental Affairs. Consulting Geologists and Ground Water Sampling personnel, Brad Maurer and Linda Aller, from the firm of Bennett and Williams, Inc., NECC's consultants, were also in attendance.

In addition to ground water and monitoring well data acquired during the site inspection and a review of correspondence contained in Ohio EPA files, the following documents provided information upon which this report is based:

Bennett and Williams, Inc., Amended Closure Plan for The Former Drum Holding Area, National Electrical Carbon Corporation, Fostoria, Ohio, 1990, (Revised 1991).

Bennett and Williams Inc., Former Drum Holding Area Closure Certification Report, National Electrical Carbon Corporation, Fostoria, Ohio, 1993.

Bennett and Williams Inc., 1993 Supplementary Annual Report Form, Ground Water Monitoring Information, National Electrical Carbon Corporation, 1994.

Bennett and Williams Inc., October 1993 Quarterly Ground Water Sampling Data, National Electrical Carbon Corporation, January 1994.

Bennett and Williams Inc., January 1994 Quarterly Ground Water Sampling Data, National Electrical Carbon Corporation, April 1994.

Bennett and Williams Inc., May 1994 Quarterly Ground Water Sampling Data, National Electrical Carbon Corporation, June 1994.

Bennett and Williams Inc., August 1994 Quarterly Ground Water Sampling Data, National Electrical Carbon Corporation, September 1994.

Kihn, G.E., Hydrogeology of the Bellvue - Castalia Area, North Central Ohio, with emphasis on Seneca Caverns, Unpublished M.S. Thesis, University of Toledo, 163 pp.

Schmidt, James J., Ground Water Resources of Seneca County Ohio Department of Natural Resources, Division of Water, 1982.

Smith, Kelly C. and Voytek, John., Ground Water Pollution Potential of Seneca County, Ohio., ERM-MIDWEST, Ohio Department of Natural Resources, Division of Water, Water Resources Section, 23 p., appendices, map, 1994.

U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Seneca County, Ohio: Cooperative Report with Ohio Department of Natural Resources, Division of Lands and Soils and Ohio Agricultural Research and Development Center, 143 p., maps, 1980.

Inspection Checklists

Attached to this report are several checklists from the RCRA Comprehensive Ground Water Monitoring Evaluation Document (Directive 9950.2) and the Interim Status Ground Water Monitoring Evaluation (SW-954). The checklists completed for this facility are:

Appendix A: Comprehensive Ground Water Monitoring Worksheet.

Appendix A-1: Facility Inspection Form for Compliance with Interim Status Standards Covering Ground Water Monitoring.

Appendix A-2: Inspection Compliance Form for a Facility That Has Determined It May Be Affecting Ground Water Quality.

II. FACILITY HISTORY AND OPERATIONS

Facility Name

National Electrical Carbon Corporation

U.S. EPA Identification Number

OHD 004 167 219

Facility Location

National Electrical Carbon Corporation (NECC), a subsidiary of Morgan Crucible Co., PLC, is located at 200 North Town Street, Fostoria, Ohio (Louden Township, Seneca County). The facility is located on a 71 acre site in an area of mixed residential and industrial usage. The site is bordered on the south by the Norfolk & Western railroad tracks. Wolf Creek is to the south of the property. The Portage River lies about two miles west of the facility. See Figure 1.

Facility Description and Operations

A letter to the Ohio EPA on March 4, 1991 informed the Agency that the facility had undergone a change in ownership. On December 12, 1986, legal ownership of NECC changed from Union Carbide Corporation to Morgan Crucible Co., PLC. See Figure 2.

National Electrical Carbon Corporation (NECC) manufactures carbon and graphite specialty products including rods, pipe, felt, cloth, porous carbon and carbon particles. Electrical products produced by NECC include a variety of carbon/graphite brushes and other carbon/graphite electrical products. The flexible graphite and carbon cloth and felt have been manufactured since the mid-1960s. The graphite and carbon cloth is the only product which requires the use of trichloroethylene.

Hazardous Waste Generated

NECC is a large quantity generator of hazardous waste. Hazardous wastes generated at the facility include lab testing materials (D001, F003, F005), waste trichloroethylene (D040, F001), floor sweepings (D008), and trichloroethylene contaminated absorbent (D040, F001). Lead and copper contaminated dust from the dust collector at building #19 is purchased by Chem-Met Services, Inc. to be recycled, therefore it is considered exempt from the hazardous waste regulations. The hazardous waste unit which is subject to the groundwater monitoring requirements was formerly used for container storage of the following: waste

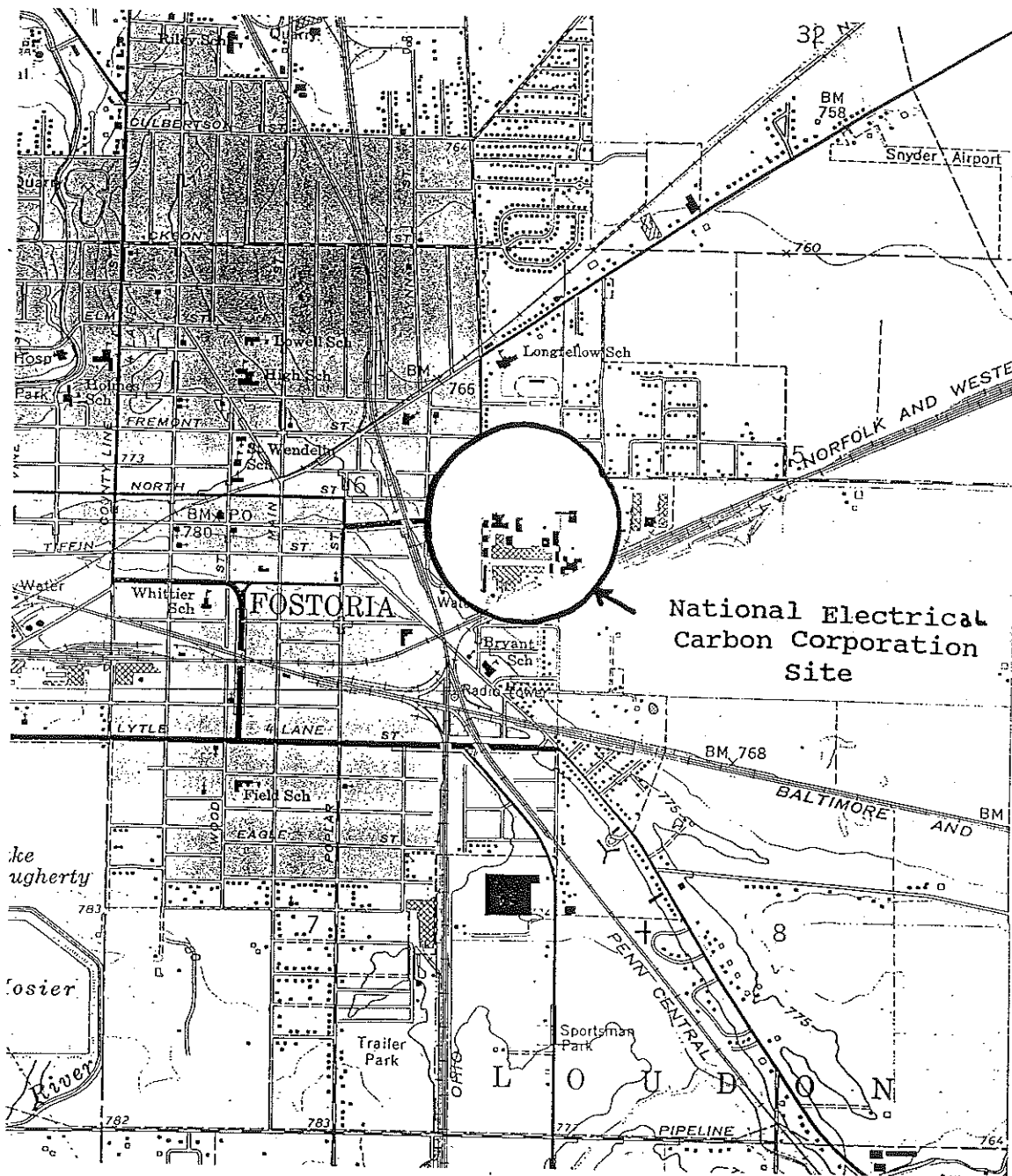


Figure 1. Site Location Map for National Electrical Carbon Corporation, Fostoria, Ohio, (USGS 7.5 minute topographic map, Fostoria, Ohio)

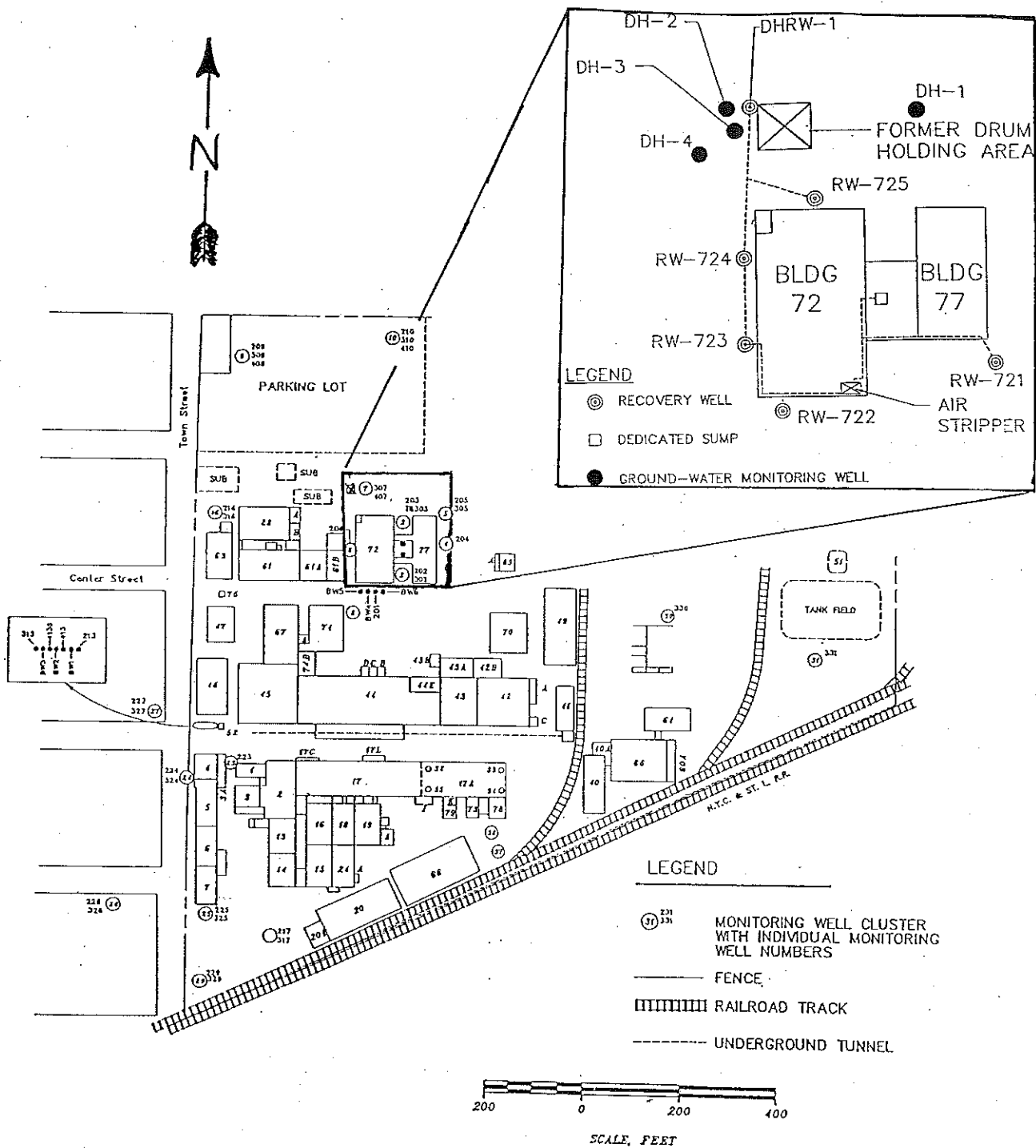


Figure 2. National Electrical Carbon Corporation Site Map showing locations of manufacturing plant, monitoring wells, regulated units, and other features. (Bennett and Williams Environmental Consultants Inc., 1991; Ohio EPA, 1994).

trichloroethylene, scrap furfural, lead contaminated carbon dust, waste flammable liquids, and trichloroethylene contaminated carbon and gravel.

Hazardous Waste Treatment, Storage and Disposal Practices

The former hazardous waste unit consisted of one fenced storage area with a concrete pad. The 25 foot by 25 foot area had the capacity to store 200 drums of hazardous waste stacked on pallets. Prior to 1984 the pad was used for the storage of equipment. In 1984 the pad was improved with the addition of a fence, ramp and berm. The concrete pad was used for the storage of hazardous wastes from 1984 to 1989, at which time the pad was removed. The hazardous waste unit was used for container storage of the following: waste trichloroethylene (F001), scrap furfural (D001), lead contaminated carbon dust (D008), waste flammable liquids (D001), and trichloroethylene contaminated carbon and gravel (U228).

The process which generates waste trichloroethylene involves cleaning or "scouring" rayon cloth. The scouring process involves passing the rayon through a vat of trichloroethylene. The solvent vapors are chilled and returned to the process. The prepared cloth is then used for manufacturing flexible carbon and graphite cloth products. Waste trichloroethylene is currently stored for less than 90 days in a sealed and bermed concrete area inside Building 76. Two satellite accumulation areas associated with the scouring unit are maintained in Building 72.

Regulatory History

NECC submitted a Part A Federal Permit Application for Hazardous Waste Management to U.S. EPA, Region V on November 18, 1980. The Part A permit was approved by the HWFB on December 28, 1981. In 1984, this permit expired and NECC requested to withdraw the permit and to close the TSD unit.

On June 5, 1987, NECC submitted a closure plan for the storage unit. Ohio EPA approved the closure plan with conditions on April 18, 1988. NECC requested an extension of the closure period on December 21, 1988 after detecting trichloroethylene in soil borings. On June 28, 1989, NECC requested another extension as they had encountered the water table during soil excavation. In a letter dated October 26, 1989, the NWDO was notified that ground water contamination at NECC had been confirmed.

On August 30, 1990, the DHWM requested the submittal of an amended closure plan to address ground water contamination. On November 9, 1990, the amended closure plan was submitted to the Ohio EPA. A revision to the amended closure plan was submitted on November 8, 1991. On April 30, 1992, the Ohio EPA approved the amended

closure/post closure plan which consisted of closing the drum storage area as a landfill with post-closure activities. On August 13, 1993, the Director received certification documents stating that the storage area had been closed according to the specifications in the approved closure plan. A closure certification inspection was completed on September 16, 1994. NECC was notified of the completion of the closure of the former drum storage area on November 10, 1994.

NECC submitted their first annual ground water report on March 4, 1994. This documentation is currently under review by the NWDO, DDAGW.

No formal Agency actions have been taken against National Electric Carbon Corporation. NECC has never been under enforcement orders with the Ohio EPA DHWM. NECC has never had any ground water related violations or deficiencies from previous actions.

III. REGIONAL AND SITE HYDROGEOLOGY

Regional Geologic Setting

National Electrical Carbon Corporation (NECC) lies within the Central Lowland Till Plain Physiographic Province and immediately south of the border between the Till Plain and Lake Plain provinces. Due to multiple advances and retreats of continental ice sheets during the Pleistocene Epoch, the area is characterized by low topographic relief. Surface elevations at the site slope northeasterly from approximately 770 feet above mean sea level (AMSL) at the southwestern corner of the site to 766 feet AMSL at the site's eastern edge. While surface topographic relief is small at the site, greater regional relief is afforded where Wolf Creek and the East Branch Portage River bisect the plains south and southwest of the site, respectively. The NECC site lies on the divide between these two drainage basins. Additional relief is provided by the hummocky terrain of the Defiance terminal moraine in the southern sections of the county.

Regionally, the glacial sediments reflect deposition in glacio-lacustrine and periglacial environments as indicated by the beach deposits and ground and terminal moraines respectively. Meltwater impounded between the Great Lakes continental drainage divide and the retreating glaciers formed a series of glacial lakes. These lakes left remnant beach deposits across the northern sections of Seneca County. Ground moraine deposits form a majority of the surface deposits in Seneca County. A tenuous east-west band of terminal moraine deposits, forming the Defiance Moraine, are found in the southern sections of the county. East of the Sandusky River, well log data indicates the existence of a buried valley.

This buried valley, a remnant of the pre-glacial Tiffin River, appears to start near the center of the county and extends northward into Sandusky County (Smith and Voytek, 1994).

The glacial deposits in the general vicinity of NECC vary in thickness from 2 to 56 feet. The soils which developed from these deposits are classified as urban land. This land was originally classified as Hoytville silty clay loam. (Soil Survey of Seneca County, Ohio, U.S. Dept. of Agriculture, SCS, 1980). Typically these soils form broad flat areas on the lake plains, are nearly level, deep and very poorly drained. Color varies from very dark gray at the surface to a mottled grayish brown and gray at approximately 60 inches depth. The permeability of the Hoytville silty clay loam ranges from 0.2 to 2.0 inches per hour at the surface to 0.06 to 2.0 inches per hour at a depth of 60 inches. The soil has a high shrink - swell potential and a pH ranging from 6.1 to 7.8 standard units (SU).

The bedrock beneath Seneca County is primarily composed of Silurian and Devonian aged dolomites, limestones and shales. These bedrock units lie on the eastern flank of the Findlay Arch. This is a structural feature that is the northern extension of the Cincinnati Arch. The Cincinnati Arch, an anticlinal structure, trends north-northeast from Cincinnati, in the south, to an area east of Toledo in the north. The bedrock units dip to the east towards the ancient Appalachian basin.

Areally, the most prominent bedrock type in Seneca County are the limestones and dolomites of the Delaware, Columbus, Monroe, and Lockport Formations. The Lockport Formation, in northwest Ohio, is further differentiated into the Guelph, Goat Island, and Gasport Dolomites. Shale formations, including the Ohio and Olentangy Shales, are limited to the extreme southeast corner of the county.

Evidence of karst geology has been identified in the extreme northeast corner of the county. This geology is recognized by fractures, dolines (sinkholes), springs, sinking streams, solution channels, and caverns. These geologic features are developed primarily in the Columbus Limestone (Kihn, 1988).

Site Geology and Hydrogeology

Introduction

The site specific hydrogeologic data for NECC were obtained during the installation of four (4) ground water monitoring wells by Bender Monitoring Well Construction (BMWCC) and Sprowls Drilling under the supervision of Bennett and Williams Inc. Data gathered from borings associated with the installation of monitoring wells DH-1, 2, 3, and 4 were summarized in the Amended Closure Plan for

The Former Drum Holding Area, National Electrical Carbon Corporation, Fostoria, Ohio, 1990, (Revised 1991). Additional hydrogeological information was derived from the quarterly ground water quality assessment reports of 1993 and 1994 (Bennett and Williams, 1993, 1994).

Site Geology

Borings performed by BMWC and Sprowls Drilling have documented unconsolidated glacial sediments, consisting of brown to dark gray silty clays and silty sands ranging in thickness from 21 to 30 feet. These sediments show the typical layering seen in glacially derived deposits.

The uppermost layer at the site is a man-made layer of crushed stone used as a road bed and designated "fill". It varies in thickness across the site from less than one foot to more than 2 feet. The crushed stone fill rests upon a 4 to 7 foot thick layer of brown to gray silty clay, that provides a semi-confining layer for the next lower unit. This next lower layer, considered the uppermost aquifer, consists of a yellow to brown to dark gray silty sand/sandy silt. Boring #331 has recorded a lense of fine gray sand, approximately 1 foot thick, at the base of this silty sand/sandy silt. This silty sand/sandy silt unit varies in thickness from approximately 3 to 7 feet. The layer immediately beneath the silty sand/sandy silt unit consists of a gray to dark gray silty clay/clayey silt which varies in thickness from approximately 9 to 19 feet. Resting upon the bedrock, and covering a small area, is a thin lense (generally a foot or less) of coarser material consisting of sand, gravel, and weathered limestone/dolomite. This lense appears to occupy a depression in the bedrock in the vicinity of borings 303, 305, and 314. In all other areas, the lower silty clay/clayey silt appears to rest upon the bedrock.

The bedrock beneath the site consists of the Lockport Dolomite. In northwest Ohio, the Lockport Dolomite is differentiated into three distinct units, the Guelph, Goat Island, and Gasport Dolomites, from the youngest to the oldest, respectively. Cross section location and cross sections A-A' and B-B' are illustrated in Figures 3, 4, and 5, respectively.

Site Hydrogeology

There are three zones of saturation defining the hydrogeology at the site. The uppermost aquifer and the unit which is presently being monitored is the 3 to 7 foot thick silty sand/sandy silt layer located at an elevation between 755 and 762 feet above mean sea level (AMSL). This aquifer is probably semi-confined since leakage through the relatively thin overlying silty clays prevents this aquifer from being completely confined. Groundwater flow in

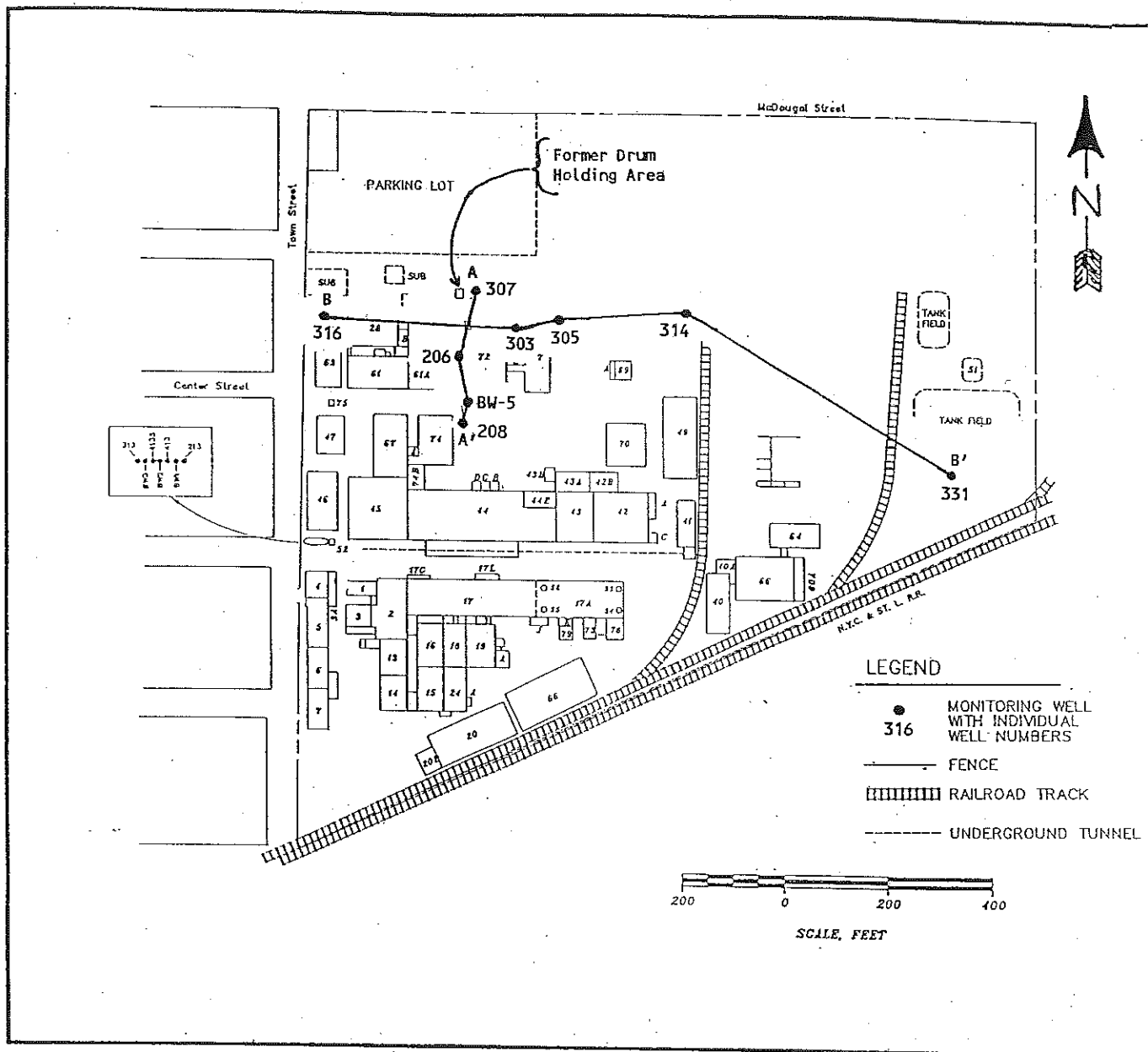


Figure 3. Map Showing Locations of Hydrostratigraphic Cross Section A-A' and B-B'. (Bennett and Williams Environmental Consultants Inc., 1991 Ohio EPA, 1994).

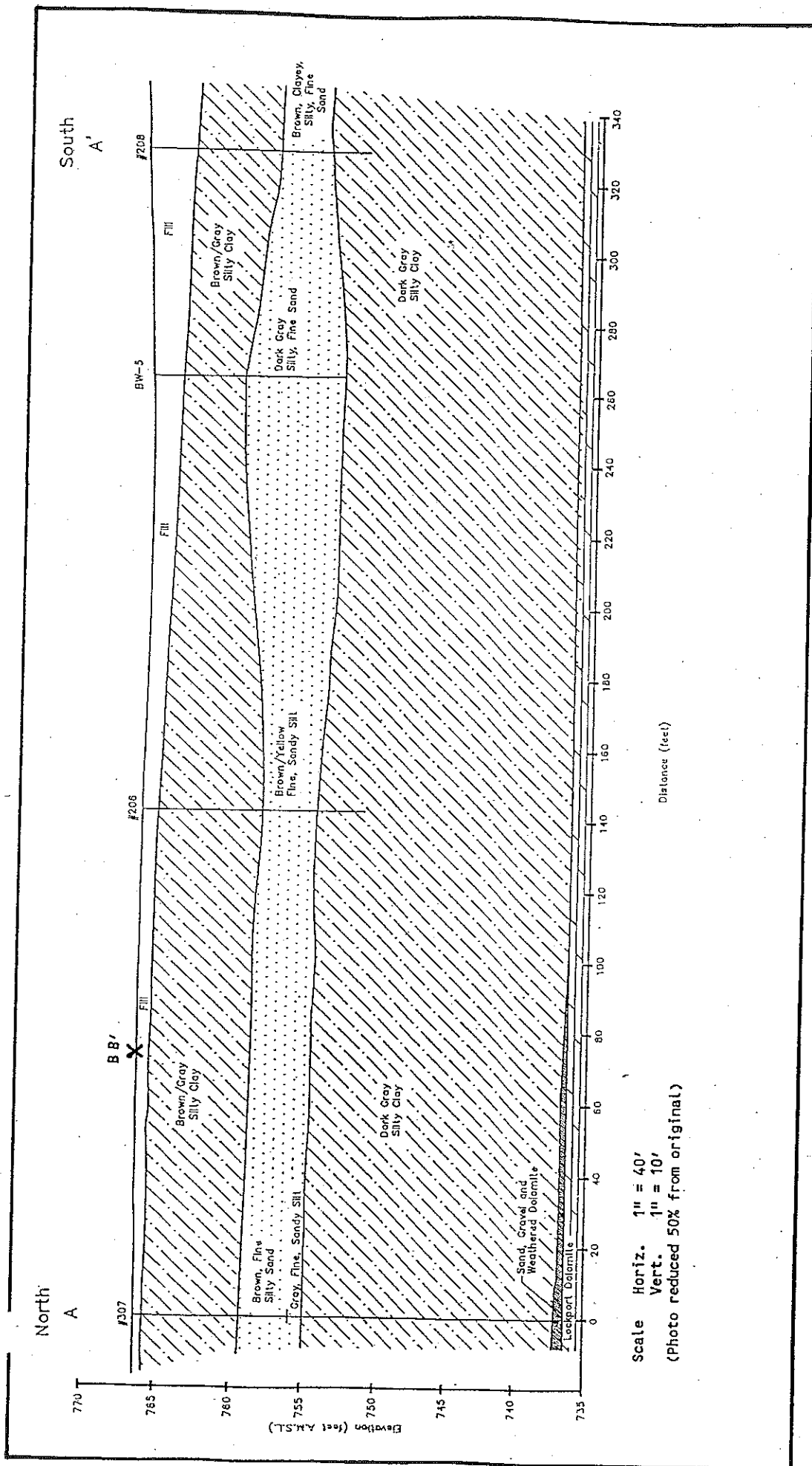


Figure 4. Hydrostratigraphic Cross Section A-A', (Bennett and Williams Environmental Consultants Inc., 1991; Ohio EPA, 1994)

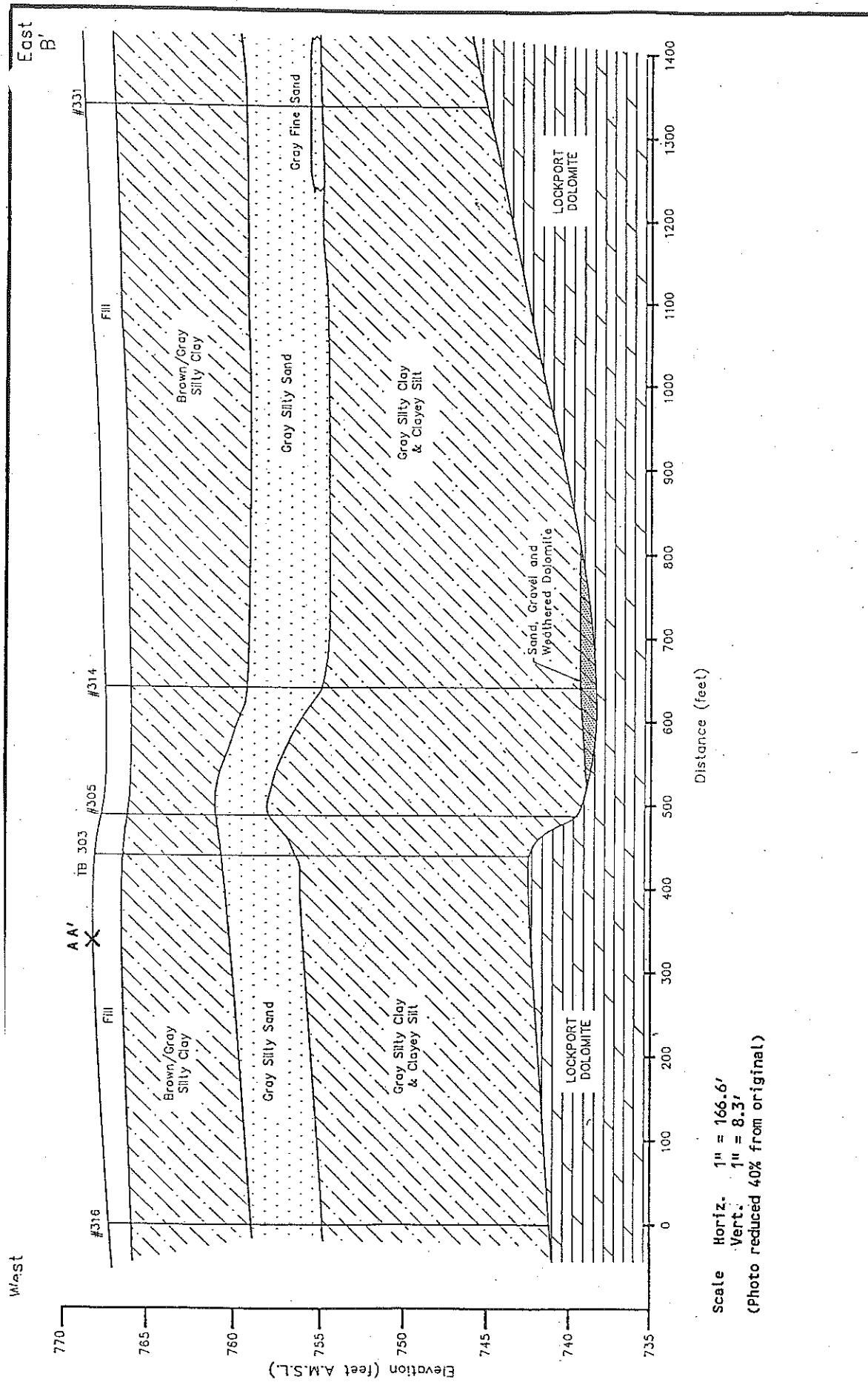


Figure 5. Hydrostratigraphic Cross Section B-B'. (Bennett and Williams Environmental Consultants Inc., 1991; Ohio EPA, 1994)

this aquifer is to the south-southwest and has a small gradient. The average hydraulic conductivity, calculated from bailing tests, is 0.734 feet per day (2.55×10^{-4} cm/sec). Figure 6 illustrates the ground water potentiometric surface map for this aquifer. It was developed from ground water elevations recorded during the CME inspection of December 12, 1994.

The second aquifer at the site is the saturated zone which exists in the coarse sand, gravel, and weathered dolomite that rests in the depression in the bedrock. This aquifer is at an elevation between 736 and 740 feet AMSL. This aquifer is confined, since minimal leakage is afforded due to the thickness of the overlying clay strata. This aquifer is discreet and discontinuous due to the limited areal extent of the sediments and may be hydraulically connected to the underlying bedrock aquifer.

The principal aquifer at the site and for much of Seneca County is the bedrock aquifer existing in the Lockport Dolomite. The bedrock surface is generally featureless and rises from approximately 736 feet to 745 feet AMSL. A slight depression in the bedrock has been noted in the vicinity of borings 303, 305, and 314. This aquifer at the site is confined by the overlying clay sediments. However, in areas where the cover is very thin (i.e., just north of Fostoria and in northeast Seneca County) confined conditions give way to semi-confined and unconfined conditions.

Yields from this aquifer, from depths less than 200 feet, can be greater than 100 gallons per minute (gpm) and are greatly influenced by the fracturing and dissolution of the carbonate rock. The principal fracture zone is in the upper 150 to 175 feet of this unit. A 72 hour constant rate aquifer test performed at the site recorded a transmissivity of 14,503 gallons per day per foot (gpd/ft). Hydraulic conductivities vary with depth and range from 6.48×10^{-4} ft/day (2.4×10^{-7} cm/sec) at the 140 to 150 foot depth interval to 0.093 ft/day (3.23×10^{-5} cm/sec) at the 45 to 55 foot depth interval. The direction of ground water flow in this aquifer is towards the north and Lake Erie since Lake Erie represents the base for regional ground water flow. At the site and locally, ground water flow in the Lockport Dolomite, may be influenced by pumping centers west and north of the NECC facility, and may also flow north-northwest for discharge to the Portage River.

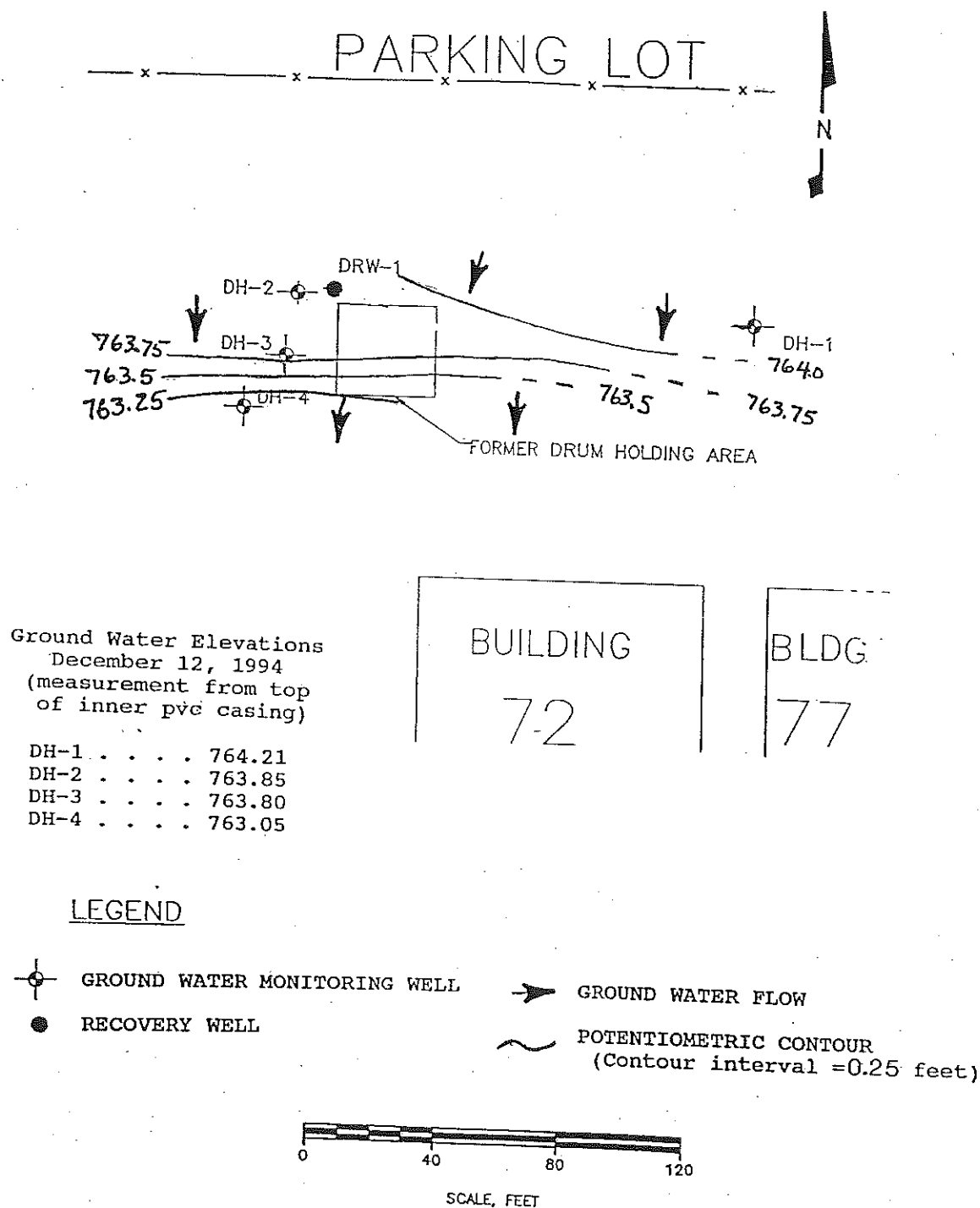


Figure 6. Uppermost Aquifer Potentiometric Surface Map at NECC developed for this CME. (Bennett and Williams Inc., Environmental Consultants Inc., 1991; Ohio EPA, 1994)

IV. GROUND WATER MONITORING SYSTEM

Ground Water Monitoring History

National Electrical Carbon Corporation has installed a ground water monitoring system containing one upgradient monitoring well (DH-1) and three downgradient monitoring wells (DH-2, 3, and 4). See Figure 6. This system was installed to monitor the ground water quality beneath and surrounding the former drum holding area, which has been certified closed. Ground water sampling and monitoring have proceeded since the installation of the monitoring wells in March 1993.

(Note: In the following discussion of the ground water monitoring system, the referenced wells will be the monitoring wells listed (DH-1, 2, 3, and 4). Any other well referenced, other than the monitoring wells, will be duly noted.)

NECC has been in quarterly assessment monitoring since it was discovered, during closure activities, that trichloroethylene (TCE) stored on the former holding area had impacted the ground water beneath this site. Soil samples, contaminated with TCE (0.18ppm) were excavated from a depth of 48 inches under the holding pad. Ground water was also encountered at this depth. Since NECC was attempting clean closure, the closure plan had to be amended to closure as a landfill with post-closure care and ground water monitoring. To assess the extent of the contamination, HydroPunch[®] borings and sampling were performed. The extent of the contamination was determined and with Ohio EPA approval, the locations for three additional monitoring wells, DH-1, 2, and 3 were confirmed. Well DH-4 was already in place and designated as BW-7-90. See Figure 7 for the locations of the HydroPunch[®] borings and well DH-4 (BW-7-90). See Figure 2 for the locations of the monitoring wells and ground water recovery wells.

The NECC facility also has 2 ground water remediation systems which were installed in 1986 and upgraded in 1992. The first system pumps and treats ground water from the vicinity of Building 4. This ground water is treated in an air stripper and is then discharged to the Fostoria municipal sanitary sewer. The second system, installed in the vicinity of Building 72 and the former drum holding area, (see Figure 2) pumps and treats ground water, using an air stripper, and discharges to the municipal sewer. The air strippers in both systems reduce the contaminants below the levels specified in the City of Fostoria discharge permits.

The system installed around Building 72 is of concern due to its proximity to the former drum holding area. The recovery wells, designated RW and DHRW on Figure 8, have a radius of influence of

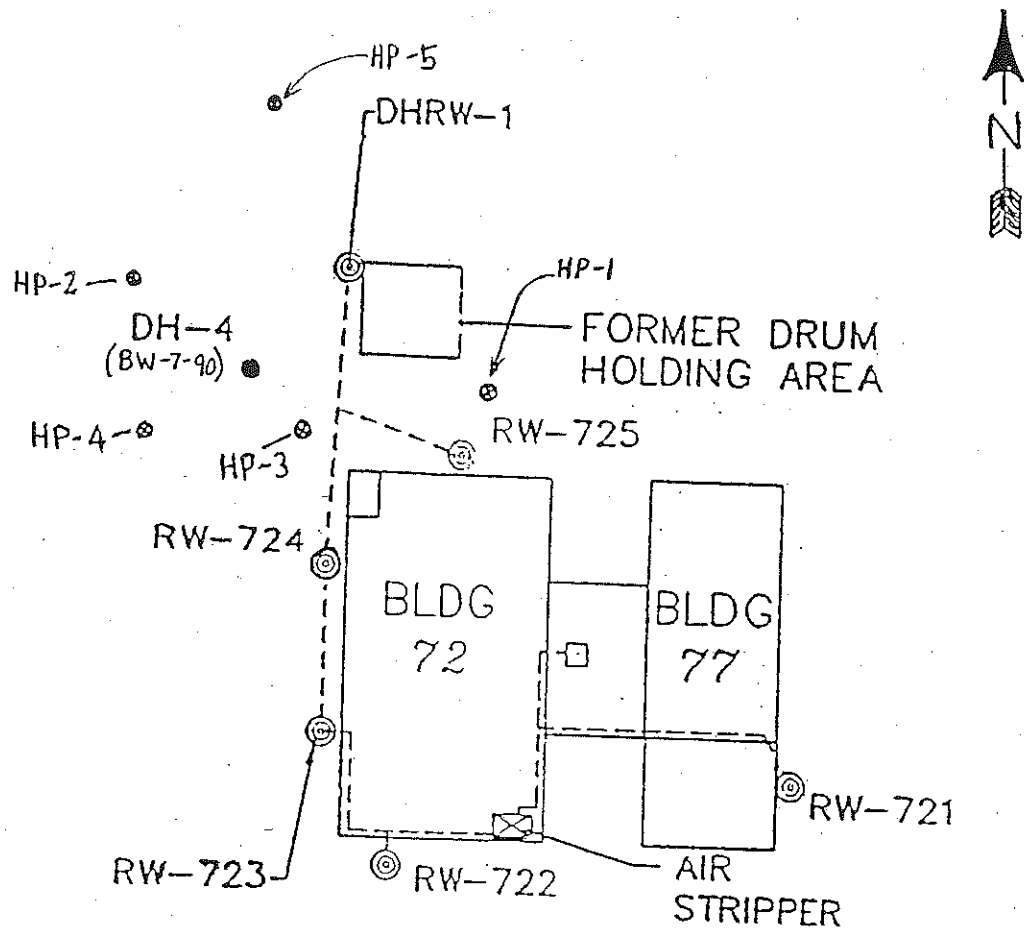


Figure 7. Location Map for Recovery Wells, HydroPunch[®] Borings/Samples, and well DH-4 (BW-7-90). (Bennett and Williams Inc., 1991; Ohio EPA, 1994)

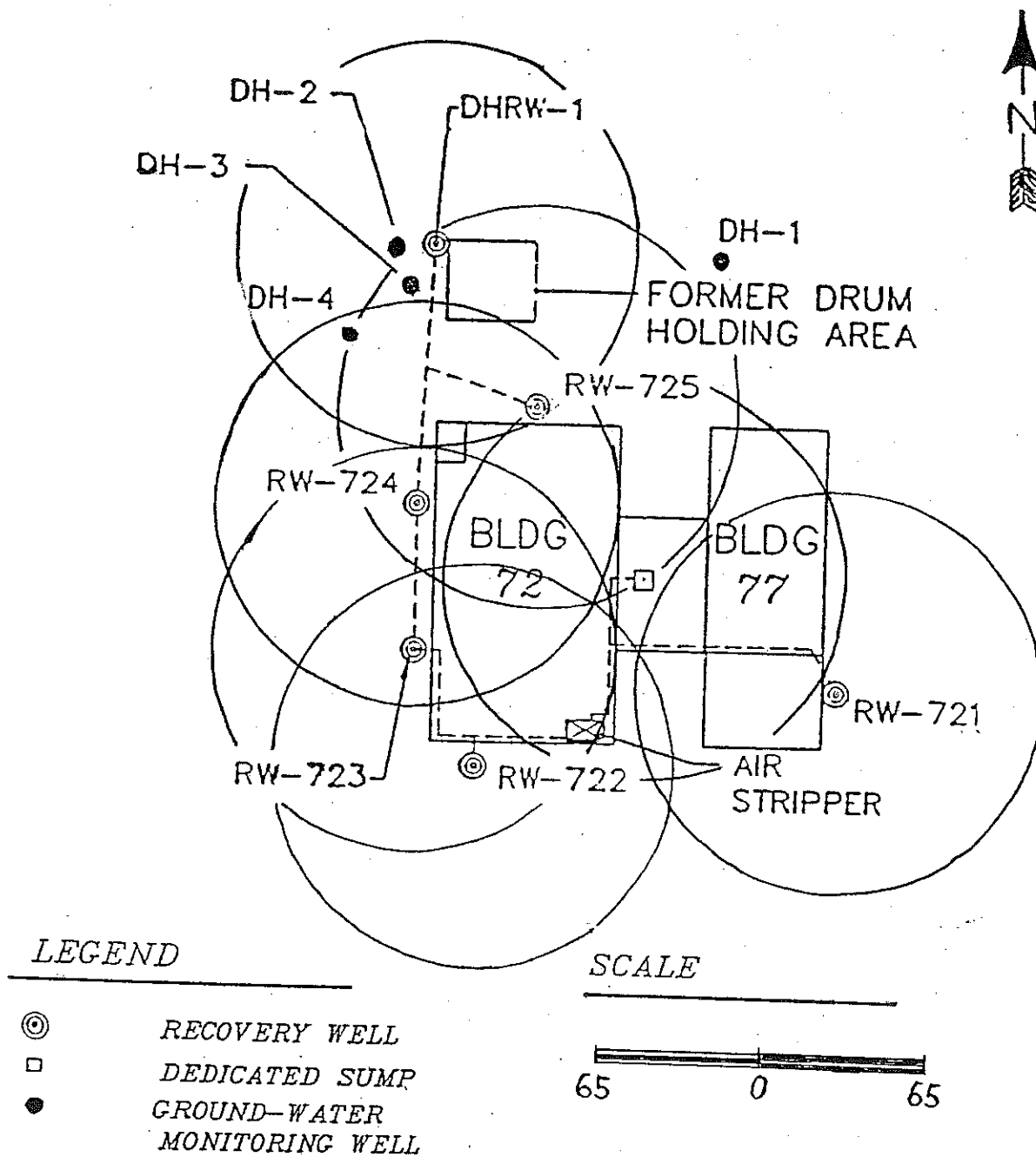


Figure 8. Map showing zones of influence of the recovery wells with respect to the former drum holding area and Building 72. (Bennett and Williams Environmental Consultants Inc., 1991; Ohio EPA, 1994)

approximately 77 feet, and as such, overlap each other to provide remediation of the area surrounding Building 72 and the former drum holding area. These recovery wells also effect the ground water flow and direction in these areas.

Monitoring Well Placement

The location of the four monitoring wells in NECC's ground water monitoring system are located as shown on Figure 6. All of these wells, DH-1, 2, 3, and 4, are screened in same saturated zone and at approximately the same elevation. This elevation corresponds to the silty sand/sandy silt strata discussed in the section on site geology. The location of these wells was dictated by the ground water quality assessment that was performed in accordance with the revised Amended Closure Plan of November 1991.

Well DH-1 is the designated upgradient well and is located approximately 43 feet east of the former drum holding area. The designated downgradient wells DH-2 and 3 are located approximately 15 and 12 feet west, respectively, of the site. Downgradient well DH-4 lies approximately 22 feet west-southwest of the site. While not an integral part of the ground water monitoring system, recovery well DHRW-1, is located at the very northwest corner of the former drum holding area.

Ground water elevations recorded in the wells DH-1, 2, 3, 4, and the recovery well, DHRW-1, are listed in Table 1. As indicated in Table 1, well DH-1 has remained in the upgradient position except for the August 4, 1994 sampling event. During this event, well DH-3's water elevation was temporarily higher than well DH-1 (0.06 foot). The change in ground water elevations between wells DH-1, 2, and 3, historically, has shown a small variance. The December 12, 1994 sampling event indicates that well DH-1 is, again, the upgradient well. NECC's ground water monitoring system, as presently installed, is adequate for monitoring the ground water quality in the uppermost aquifer as per OAC Rule 3745-65-91 (A) (1) and (2) and 3745-65-93 (D) (4).

Monitoring Well Installation and Construction

Monitoring wells DH-1, 2, and 3 were installed in borings drilled with hollow stem augers. The borings were continuously sampled at 2 foot intervals, using split spoon samplers, for the entire depth of the borings. The changes in the deposits were logged and are included as Appendix G in the Amended Closure Plan and as Appendix F in the Closure Certification Report.

Table 1. Ground Water Elevations at NECC's Monitoring and Recovery wells for the Compliance Period from 1993 through 1994. (all elevations are in feet above mean sea level)

Monitoring Well	Quarterly Ground Water Surface Elevations			
	<u>1993</u>			
	First Qtr no sample	Second Qtr 04/14/93	Third Qtr 07/02/93	Fourth Qtr 10/28/93
DH-1	Note 1	764.95	762.70	762.42
DH-2	"	763.90	762.61	762.23
DH-3	"	764.12	762.53	762.24
DH-4	Note 2	Note 2	Note 2	758.80
DHRW-1	763.30	763.66	762.64	760.78
<u>1994</u>				
	First Qtr 01/31/94	Second Qtr 05/31/94	Third Qtr 08/04/94	Fourth Qtr 12/12/94
DH-1	Note 3	762.38	762.01	764.21
DH-2	762.28	762.28	762.00	763.85
DH-3	762.38	762.33	762.07	763.80
DH-4	760.06	759.61	759.42	763.05
DHRW-1	760.57	762.32	762.02	Note 4

Note 1. Wells DH-1, 2, and 3 were installed in March 1993

Note 2. Elevation of the casing for well DH-4 was completed on July 22, 1993. Therefore accurate elevations are not available.

Note 3. Elevations were not recorded due to equipment failure.

Note 4. Elevations were not recorded during this CME inspection and sampling event.

Wells DH-1, 2, and 3 were constructed of 2 inch diameter polyvinyl chloride (PVC) risers with 5 feet of 10 slot PVC screen at their base. The screens were placed at a depth to intercept ground water flow from the uppermost aquifer. The filter pack, placed around and 2 feet above the screen, is composed of clean silica sand. Immediately above the silica sand, a 6 inch layer of fine mortar sand was placed in the annulus to act as a seal for the bentonite pellets. A layer of bentonite pellets, 1 foot thick, was placed above the fine sand to seal the filter pack. The remaining annular

space above the bentonite pellets was sealed with a 2% bentonite-cement grout mixture, using a tremie pipe for placement. A lockable protective steel pipe was placed over the PVC well pipe and sealed to the ground surface with a concrete pad.

Well DH-4 was installed in September 1990 and is constructed somewhat differently. The well is constructed of 2 inch PVC with 2.5 feet of 10 slot screen at its base. The screen intercepts ground water at the interface between the uppermost aquifer's fine sand and the silty clay strata immediately below. The filter pack, in the annulus around and 1.5 feet above the screen, is composed of #4 Parry sand. The remainder of the borehole annulus, up to the concrete pad, was filled with bentonite pellets. A concrete pad, 1.5 feet thick and twice the diameter of the borehole, was placed above the bentonite pellets. A lockable protective steel casing was then set into the concrete. (It should be noted that this concrete pad was not discernable during the CME inspection and may be below grade.) Sand was placed inside the protective casing to stabilize the monitoring well casing which is above grade.

The wells were developed using a surge and bail technique and continued until the ground water being discharged was relatively sediment free. Well development was considered complete when:

- 1) turbidity readings no longer continued to improve
- 2) pH, specific conductance, and temperature were constant for three consecutive readings.

All ground water generated from well development was containerized and then discharged to the ground water recovery system for treatment. Table 2 lists all the well construction and installation information. The construction of the wells is consistent with OAC Rule 3745-65-91(C).

The wells were surveyed for location and elevation and are included on the survey plat for NECC's closure of the former drum holding area. The plat is included in the Closure Certification Report of July 1993.

Monitoring Well Maintenance

The inspection of the monitoring wells for this CME, performed on December 12, 1994, indicate that the monitoring wells meet the conditions of OAC Rule 3745-65-91(C). However, the following deficiencies were noted:

- 1) None of the wells have labels designating the well. All of the monitoring wells should be labeled or numbered for identification.
- 2) The outer lockable protective steel pipes are rusting and in need of maintenance. They should be painted.
- 3) The concrete pads surrounding and supporting the lockable protective steel pipes at wells DH-1, 2 and 3 are cracked and in disrepair. Well DH-4 has no discernable concrete pad and may be below grade. The concrete pads are an integral part of the monitoring well system and are used to seal the well from surface runoff. The concrete pads should be replaced/installed above grade, around all of the wells.
- 4) No observable reference marks, to be used for water level measurements, were noted on any of the monitoring wells. However, all measurements for ground water elevations were made consistently from the top of the inner well casing next to the hinge on the outer lockable protective steel casing. Reference marks should be placed on all wells.
- 5) Since well DH-4 is close to the access road at the rear of Building 72, NECC should install guard barriers to protect the well from damage.

Table 3 lists the inspection details as well as the depths to ground water and total monitoring well depth.

V. SAMPLING AND ANALYSIS PLAN AND PROCEDURES

Sampling and Analysis Plan Review

NECC's Sampling and Analysis Plan (SAP) is documented in the Ground Water Quality Assessment Plan (GWQAP) and is listed under Post Closure Care, Section III, of the Amended Closure Plan of November 1991. The SAP, which is kept on site, documents most of the provisions of OAC Rule 3745-65-92(A) (*) except for the following violations: (asterisk indicates additional rule suffix)

- 1) (3)(d) The SAP does not specify the containers which will be used for sampling. Samples for the analysis of Volatile Organic Compounds (VOC's) requires glass containers with teflon septa/caps.
- 2) (7)(b) The SAP does not list the detection limits for the VOCs which are analyzed. Detection limits should be listed in the SAP.

TABLE 3.

CHE GROUND WATER MONITORING
FIELD INSPECTION FORMFACILITY NECCDATE 12-20-94

MONITORING WELL	I.D.	DH-1	DH-2	DH-3	DH-4				
1	Correct location?	Yes	Yes	Yes	Yes				
2	Labeled Properly?	No	No	No	No	See Comment 1			
3	Locking cap in good shape?	Yes	Yes	Yes	Yes				
4	Locked?	Yes	Yes	Yes	Yes				
5	Outer Casing: Material	UGMS	UGMS	UGMS	UGMS				
6	Condition	Rusted	Rusted	Rusted	Rusted	See Comment 2			
7	Stickup	2.11	2.06	2.15	1.83				
8	Condition of concrete pad	See Comment 3							
9	Ponding of water around well?	No	No	No	No				
10	Inner casing: Material	PVC	PVC	PVC	PVC				
11	Condition	Good	Good	Good	Good				
12	Reference Mark in Place?	See Comment 4							
	Water Level Measurements	See Comment 5							
13	WtH: Depth to Water	4.19	4.68	4.88	5.38				
14	Total depth	14.80	14.67	15.11	12.62				

Comments:

1. None of the monitoring wells have labels designating individual wells.
2. While the outer casings are competent, they are rusting and should be painted.
3. Monitor wells DH-1, 2, and 3 have concrete pads that are cracked and in disrepair. Monitoring well DH-4 has no discernable concrete pad.
4. The top of all the inner well casings are horizontal (i.e., were not cut off at an angle). The reference point for water level measurements are taken on top of the inner casing adjacent to the hinge on the outer casing.
5. Ground water elevations and total well depth were taken using an electric sounding tape.

Notes:

- a. All stick-up, ground water level and total depth measurements are in feet.
- b. Abbreviations: ugms = ungalvanized mild steel, PVC = Polyvinyl Chloride

- 3) (7) (c) The SAP does not list the holding times for the various VOCs which are analyzed. Holding times should be listed in the SAP.
- 4) (8) (c) The SAP does not discuss potential interferences as part of the QA/QC program. The SAP should discuss procedures the facility will use if, due to sample matrix interferences, the laboratory is unable to obtain an analytical measurement for any constituent or parameter. The facility must also be able to supply the data from laboratory QC samples that are used as measures of analytical equipment performance or as indicators of potential sources of laboratory induced contamination.
- 5) (9) (b) The SAP does not contain an example of a sample label. An example of a sample label including all information needed for effective sample tracking should be included in the SAP.

Field Evaluation of Sampling and Analysis Procedures

The evaluation of the sampling event was performed as part of the CME inspection of December 12, 1994. Sampling was performed by Brad Maurer and Linda Aller of Bennett and Williams, Incorporated NECC's consultant.

Ground water elevation measurements were performed by proceeding from upgradient well DH-1 to downgradient wells DH-2, 3, and 4. The observations of the sampling procedures were made at upgradient well DH-1.

The purging of the well prior to sampling and the subsequent sampling of the well were performed using Voss disposable polyethylene bailers and new nylon twine. Purged water was containerized and subsequently added to the ground water recovery system for treatment. In addition to the field determination of temperature, pH, and specific conductance, the parameters, dissolved oxygen and turbidity were also analyzed. Samples were collected into 40 milliliter vials for analysis of the following VOCs: trichloroethylene (TCE), cis and trans 1,2-dichloroethylene (DCE), 1,2-dichloroethane (DCA), 1,1-DCA, and vinyl chloride. Sample vials were filled from the bailers through a device called a "VOC tip".

The VOC tip, is attached to the ball check valve end of the bailer and consists of a petcock and small gauge tubing for discharging the sample. The VOC tip governs the flow of the sample into the vials and considerably minimizes aeration of the sample. Vials were sealed without headspace, labeled and designated with all appropriate tracking information, and placed into 4° Celsius cooler for transport to the laboratory for analysis.

VI. ASSESSMENT MONITORING PROGRAM

Assessment Monitoring Program Description

NECC was not required to maintain a ground water detection monitoring system for the former drum holding area (FDHA) at their facility. The ground water monitoring system, that was in place prior to closure activities at the drum holding area, was installed in response to a spill of approximately 600 gallons of TCE in February 1985. Most of these monitoring wells were installed in clusters (209, 309, 409) and are centered around Building 4 and Buildings 72 and 77 (see Figure 2). Other monitoring wells are scattered across the site.

Ground water quality assessment monitoring at NECC started with the determination that the ground water beneath/surrounding the FDHA may be contaminated with TCE and it's degradation products. Soils at a depth of 48 inches beneath the drum holding pad had TCE concentrations of 0.183 milligrams/kilogram (0.183 ppm). Ground water was also encountered at approximately the same depth. It was assumed that the ground water was contaminated and the Ohio EPA was informed. Ohio EPA determined that clean closure was not possible and that an amended closure plan would be required. In August 1990, the Ohio EPA requested an Amended Closure Plan for the FDHA. It was to address closure of the FDHA as a landfill and was to include documentation for post-closure care and ground water monitoring. The Amended Closure Plan of November 1991 (approved April 1992) includes a chapter on the "Rate and Extent of TCE Contamination" (under Section III, Scope of Work), a Ground Water Quality Assessment Plan (GWQAP), and a section on monitoring well installation and development.

Ground Water Quality Assessment Plan/Implementation

The GWQAP, documented in the Amended Closure Plan, was submitted to the Ohio EPA on November 8, 1991. Also enclosed in the Amended Closure Plan is an Implementation Schedule for assessment activities. The GWQAP addresses most of the provisions of OAC Rule 3745-65-93 (D).

(Note: The GWQAP section of the Amended Closure Plan cites two different sections of the OAC Rules (3745-65-93 and 3745-54-90 to 98) that will be used in the development of this document. Since the Ohio EPA has reviewed this document using OAC Rule 3745-65-93, the language citing OAC Rules 3745-54-90 to 98 should be removed from the Amended Closure Plan. At this time, NECC is not required to be in compliance with OAC Rules 3745-54-90 to 98)

The proposed investigative approach to assessment monitoring at NECC is the use of the HydroPunch^R technique. While this method will provide data on the extent and concentration of the contaminants in the ground water it does not allow the determination of the rate of migration of the contaminants. The GWQAP does not stipulate what methodology will be used to determine the contaminant migration rate and is a violation of OAC Rule 3745-65-93 (D) (3) (c) (iv). A discussion of the determination of the rate of migration should include the use of ground water velocity, retardation factors, solubility and dispersion coefficients, and degradation products of the contaminants.

The Amended Closure Plan's GWQAP states that the evaluation of the sampling data will use the statistical method of direct comparison to delineate any changes in the ground water quality between consecutive sampling events. Sampling results have been consistent and statistical direct comparisons of the data indicate that contaminant concentrations have not increased significantly.

A weekly implementation schedule was provided (Section V of the Amended Closure Plan) which addresses ground water quality assessment activities including ground water investigations, installation of monitoring and recovery wells, and two years of ground water sampling.

NECC began ground water quality assessment activities on August 25, 1992 with the drilling and ground water sampling of the area around the FDHA. To assess the rate and extent of the TCE contamination, HydroPunch^R water sampling and on-site VOC analyses were conducted. The HydroPunch^R technique and on-site sampling analysis allowed Bennett and Williams Inc., NECC's consultant to:

- 1) more rapidly evaluate the ground water quality and
- 2) be more flexible in the sampling process by allowing the samplers to adjust the sampling pattern based on the previous HydroPunch^R sample results.

Figure 7 shows the HydroPunch^R locations. Table 4 lists the on-site Gas Chromatograph (GC) analyses of the HydroPunch^R samples.

In addition to the ground water sampling performed using the HydroPunch^R, ground water samples were taken from nearby monitoring wells. These included monitoring wells BW-7-90, 209, 210, and 216 (see Figure 2 for locations). These ground water samples, along with split samples from HydroPunch^R samples 4 and 5, were sent off-site for analysis at Wadsworth/Alert Laboratories. The results of the analyses of the six VOCs stipulated in the GWQAP and Amended Closure Plan, are listed in Table 5. Based on this information, the locations for the two downgradient (DH-2 and 3), one upgradient (DH-1) and one recovery well (DHRW-1) were proposed to the Ohio EPA for approval. Upon review of the data, Ohio EPA suggested slightly

Table 4. Field GC¹ Analytical data from HydroPunch^R ground water samples collected August 25, 1992. (Bennett and Williams Inc. 1991)

Sample ID.	TCE	Trans 1,2-DCE	Cis 1,2-DCE	1,1-DCA	1,2-DCA
HP-1	<10 ²	<50	<50	<50	<10
HP-2	<10	<50	<50	<50	<10
HP-3	<10	<50	<50	<50	<10
HP-4*	<10	<50	<50	<50	<10
HP-5*	<10	<50	<50	<50	<10

Note 1. GC = Gas Chromatography

Note 2. Detection limits using Gas Chromatographic techniques are:
 10 micrograms/liter (ppb) for TCE and 1,2-DCA.
 50 micrograms/liter (ppb) for Trans and Cis 1,2-DCE and 1,2-DCA.

Asterik (*) denotes a split sample submitted to Wadsworth/Alert Laboratories for confirmation analyses.

different locations for these wells. These new locations were accepted by the company and approved by Ohio EPA.

The additional downgradient, upgradient and recovery wells were installed on March 16, 1993 and initially sampled on April 14, 1993. Sampling for TCE, cis and trans 1,2-DCE, 1,1-DCA, 1,2-DCA, and vinyl chloride has proceeded quarterly since April 1993. Sampling, reporting and submittal dates are recorded in Table 6.

Assessment Monitoring Sampling Events

Assessment monitoring commenced with the first determination under OAC Rule 3745-65-93(D) (5) and was performed as soon as technically feasible. The results of this determination were submitted to the Ohio EPA within the fifteen day time limit. Under the provisions of OAC Rule 3745-65-93(D) (7) (a) and since NECC started assessment monitoring prior to certified closure, NECC has completed quarterly ground water quality assessment sampling. Table 6 list the assessment monitoring sampling events and reporting information.

Table 5. Analytical Results from Ground Water Samples taken from Monitoring wells and HydroPunch^R samples 4 and 5.
(Bennett and Williams Inc. 1991)

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>METHOD</u>
BW-7-90 8-26-92 11:00 (DH-4)				
Volatile Organics				
1,1-Dichloroethane	ND	1	ug/L	SW846 8010
1,2-Dichloroethane	ND	1	ug/L	SW846 8010
cis-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
trans-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
Trichloroethylene	ND	1	ug/L	SW846 8010
Vinyl chloride	ND	1	ug/L	SW846 8010
BW-7A-90 8-26-92 11:00 (DH-4)				
Volatile Organics				
1,1-Dichloroethane	ND	1	ug/L	SW846 8010
1,2-Dichloroethane	ND	1	ug/L	SW846 8010
cis-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
trans-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
Trichloroethylene	ND	1	ug/L	SW846 8010
Vinyl chloride	ND	1	ug/L	SW846 8010
209 8-26-92 13:15				
Volatile Organics				
1,1-Dichloroethane	ND	1	ug/L	SW846 8010
1,2-Dichloroethane	ND	1	ug/L	SW846 8010
cis-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
trans-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
Trichloroethylene	ND	1	ug/L	SW846 8010
Vinyl chloride	ND	1	ug/L	SW846 8010
216 8-26-92 11:30				
Volatile Organics				
1,1-Dichloroethane	ND	1	ug/L	SW846 8010
1,2-Dichloroethane	ND	1	ug/L	SW846 8010
cis-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
trans-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
Trichloroethylene	ND	1	ug/L	SW846 8010
Vinyl chloride	ND	1	ug/L	SW846 8010

Table 5. (continued)

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNIT	
210 8-26-92 12:15				
Volatile Organics				
1,1-Dichloroethane	ND	1	ug/L	SW846 8010
1,2-Dichloroethane	ND	1	ug/L	SW846 8010
cis-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
trans-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
Trichloroethylene	ND	1	ug/L	SW846 8010
Vinyl chloride	ND	1	ug/L	SW846 8010
HP-4 8-25-92 16:35				
Volatile Organics				
1,1-Dichloroethane	ND	1	ug/L	SW846 8010
1,2-Dichloroethane	ND	1	ug/L	SW846 8010
cis-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
trans-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
Trichloroethylene	ND	1	ug/L	SW846 8010
Vinyl chloride	ND	1	ug/L	SW846 8010
HP-5 8-26-92 18:20				
Volatile Organics				
1,1-Dichloroethane	ND	1	ug/L	SW846 8010
1,2-Dichloroethane	ND	1	ug/L	SW846 8010
cis-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
trans-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
Trichloroethylene	ND	1	ug/L	SW846 8010
Vinyl chloride	ND	1	ug/L	SW846 8010
TRIP BLANK 8-27-92				
Volatile Organics				
1,1-Dichloroethane	ND	1	ug/L	SW846 8010
1,2-Dichloroethane	ND	1	ug/L	SW846 8010
cis-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
trans-1,2-Dichloroethylene	ND	1	ug/L	SW846 8010
Trichloroethylene	ND	1	ug/L	SW846 8010
Vinyl chloride	ND	1	ug/L	SW846 8010

Table 6. Assessment Monitoring Sampling Events and Reporting Information at National Electrical Carbon Corporation.

Year	Event	Purpose	Sampling Date	Laboratory Results Date	Ohio EPA Receipt Date
1990	Amd Clo Rqd	Closure	08/30/90	--	--
1990	Amd Clo Sub	Closure	11/09/90	--	--
1991	Rev Amd Clo	Closure	11/08/91	--	--
1992	OEPA Approv	Closure	04/30/92	includes SAP and GWQAP	
1992	Assess Act	Assess.	08/25/92	--	--
1992	Assess Smpl	Assess.	08/26/92	--	--
1993	Well Instll	Assess.	03/16/93	--	--
1993	Qtrly	1st Det.	04/14/93	05/05/93	05/07/93
1993	Qtrly	Assess.	07/02/93	07/28/93	08/03/93
1993	Qtrly	Assess.	10/28/93	01/20/94	01/25/94
1994	Qtrly	Assess.	01/31/94	04/19/94	04/25/94
1994	Ann. Rpt.	Assess.	--	--	03/04/94
1994	Qtrly	Assess.	05/31/94	06/28/94	07/06/94
1994	Qtrly	Assess.	08/04/94	09/08/94	09/14/94
1994	Qtrly	Assess.	12/12/94	01/03/95	01/13/95

Explanation of Abbreviations

Amd Clo Rqd Amended Closure Plan requested by OEPA
 Amd Clo Sub..... Amended Closure Plan submitted
 Rev Amd Clo..... Revised Amended Closure Plan submitted
 OEPA Approv..... OEPA approval of revised Amended Closure Plan
 Assess Act..... Assessment Activities started
 Assess Smpl..... Initial ground water assessment sampling
 Well Instll..... Well installation for assessment monitoring
 1st Det. First Determination
 Qtrly. Quarterly ground water assessment sampling
 Assess. Assessment Monitoring
 Ann. Rpt. Annual Report

Ground Water Quality Analytical Results

The ground water quality analytical results for the FDHA have consistently shown that the ground water quality has remained static for the last seven quarters of assessment monitoring. Table 7 lists the sampling parameters and frequency of sampling as specified in the Amended Closure Plan.

Table 7. Sampling Frequency and Parameters For Assessment
Monitoring at National Electrical Carbon Corporation

Site Specific Parameters

Trichloroethylene (TCE)
Vinyl Chloride
Cis 1,2-Dichloroethylene (cis 1,2-DCE)
Trans 1,2-Dichloroethylene (trans 1,2-DCE)
1,1 Dichloroethane (DCA)
1,2 Dichloroethane (DCA)

Field analyses include: pH, specific conductance, temperature,
dissolved oxygen, turbidity

All of the above parameters are sampled and analyzed quarterly.
However, pH, specific conductance, temperature, dissolved oxygen,
and turbidity are not required, as per the Amended Closure Plan.

Well DH-4 is the only well which has consistantly shown any contamination (albeit, very slight) for the assessment monitoring period. The results of the analyses for the contaminant, 1,2-DCA, in well DH-4 are listed in Table 8. All other monitoring well samples, trip, duplicate, split, and equipment blanks were "non-detects" for the entire sampling period.

A review of the December 12, 1994 sampling results indicates that all of the sampling parameters specified in Section III, Post Closure Care, Ground Water Quality Assessment Plan, of the Amended Closure Plan, were not analyzed. The compound, trans 1,2-dichloroethylene, was not analyzed. This ommission is a violation of OAC Rule 3745-65-93(D) (7) (a).

Ground water elevations recorded during the sampling events (See Table 1.) indicate that ground water elevations at upgradient well DH-1 have been consistantly higher than the surrounding monitoring wells except for the August 4, 1994 sampling event. The ground water elevations in downgradient well DH-3 were slightly higher than in well DH-1 (0.06 inch difference). During the December 12, 1994 sampling event, ground water elevation in well DH-1 was, again, higher than the other monitoring wells. Ground water elevations at the FDHA site have shown very little differences between the monitoring wells. Well DH-4 characteristically has shown the largest difference with a range from 1 to 4 feet lower than the other monitoring wells.

Table 8. Ground Water Analytical Results for Well DH-4 and DH-4 Duplicates Samples. (results expressed in ug/l)

1,2-Dichloroethane Concentrations (all results expressed in ug/l)				
<u>1993</u>				
Well	First Qtr no sample	Second Qtr 04/14/93	Third Qtr 07/02/93	Fourth Qtr 10/28/93
DH-4	--	1.20	2.00	1.40
DH-4 Dup.	--	-- ¹	2.10	1.15
<u>1994</u>				
	First Qtr 01/31/94	Second Qtr 05/31/94	Third Qtr 08/04/94	Fourth Qtr 12/12/94
DH-4	1.20	1.30	2.00	1.00
DH-4 Dup	1.30	1.50	-- ¹	ND ²

Note 1. Duplicate samples were not taken during this sampling event

Note 2. ND = Not detected at or above the detection limit of 1.00 micrograms/liter (ug/l) (ppb)

VII. RECORDKEEPING AND REPORTING REQUIREMENTS

Recordkeeping

NECC has conducted assessment monitoring from 1993 through 1994. Assessment monitoring was initiated when clean closure of the FDHA was not achievable. An Amended Closure Plan containing a GWQAP was submitted and approved which described assessment activities. NECC has maintained records of their ground water assessment monitoring, including ground water elevations and laboratory/consultant ground water analytical reports performed during each sampling. However, a field logbook, which records field activities during the sampling events, and chain of custody forms for all sampling events, except the December 12, 1994 sampling event were not maintained. A field logbook should be maintained at the site in order to document any conditions and/or problems that may have developed during the sampling event. Chain of custody forms are needed to prevent the loss of control or loss of samples. The failure to maintain the field logbook and chain of custody forms is a violation of OAC Rule 3745-65-94 (B) (1).

Reporting Requirements

The 1993 annual report was not received in a timely manner on or before March 1 1994. The report was received at the Ohio EPA on March 4, 1994, three days late and in violation of OAC Rule 3745-65-75. Furthermore, deficiencies and violations in this report include:

- 1) Calculations for the determination of the rate of migration were not provided. These should include ground water velocity, retardation factors, solubility and dispersion coefficients, and degradation products of the contaminants.
- 2) A map or narrative description describing the extent of the contaminant plume. This may be a map of the HydroPunch^R boring locations or a narrative describing the HydroPunch^R methodology.
- 3) A ground water potentiometric surface map showing ground water flow directions in the uppermost aquifer for each sampling event were not included in the report. The map that was submitted (July 1993 sampling event) was replicated three times and submitted with the individual monitoring well data. The map did not depict ground water flow directions.

VIII. COMPLIANCE STATUS SUMMARY

As a result of this Comprehensive Ground Water Monitoring Evaluation, the following violations and deficiencies of the Rules 3745-65-90 through 3745-65-94 and 3745-65-75 (F) of the Ohio Administrative Code have been identified concerning the ground water monitoring program conducted by National Electrical Carbon Corporation. Each violation and deficiency is cited below with an explanation of the nature of the occurrence provided. For additional information, the CME report text and the attached technical and regulatory checklists in appendices A, A-1, and A-2 should be consulted.

Violations

1) OAC Rule 3745-65-75

National Electrical Carbon Corporation has failed to submit annual reports on or before the March 1st deadline for the 1993 compliance year. The specific violations are listed below:

Annual Report 1993 -- submitted March 4, 1994 - 3 days late.

2) OAC Rule 3745-65-92(A)

National Electrical Carbon Corporation's Sampling and Analysis Plan (SAP) is documented in the Ground Water Quality Assessment Plan (GWQAP) and is listed under Post Closure Care, Section III, of the Amended Closure Plan of November 1991. The SAP, which is kept on site, documents most of the provisions of OAC Rule 3745-65-92(A) (*) except for the following violations (asterisk indicates additional rule suffix):

- (3) (d) Does not specify the containers which will be used for sampling. Samples for the analysis of Volatile Organic Compounds (VOC's) require glass containers with teflon septa/caps.
- (7) (b) Does not list the detection limits for the VOC's which are analyzed. Detection limits should be listed in the SAP.
- (7) (c) Does not list the holding times for the various VOC's which are analyzed. Holding times should be listed in the SAP.
- (8) (c) Does not discuss potential interferences as part of the QA/QC program. The SAP should discuss procedures the facility will use if, due to sample matrix interferences, the laboratory is unable to obtain an analytical measurement for any constituent or parameter. The facility must also be able to supply the data from laboratory QC samples that are used as measures of analytical equipment performance or as indicators of potential sources of laboratory induced contamination.
- (9) (b) Does not contain an example of a sample label. An example of a sample label including all information needed for effective sample tracking should be included in the SAP.

3) OAC Rule 3745-65-93(D) (3) (c) (iv)

National Electrical Carbon Corporation has failed to provide, in the Ground Water Quality Assessment Plan, the methodology to determine the rate of migration of the contaminants. A discussion of the determination of the rate of migration should include the use of ground water velocity, retardation factors, solubility and dispersion coefficients, and degradation products of the contaminants.

4) OAC Rule 3745-65-93(D) (7) (a)

National Electrical Carbon Corporation has failed to perform the required analyses of the site specific volatile organic compounds for the December 12, 1994 sampling event. The analysis of the volatile organic compound, trans 1,2-dichloroethylene, was not performed during this sampling event.

5) OAC Rule 3745-65-94(B) (1)

National Electrical Carbon Corporation has failed to maintain records of the analyses and evaluations specified in the GWQAP. Specifically, a field logbook noting field analyses and any problems during sampling was not maintained on site. Chain of custody forms for all assessment sampling events except the December 12, 1994 sampling event were not maintained at the site.

6) OAC Rule 3745-65-94(B) (2)

National Electrical Carbon Corporation has failed to describe the hydrogeologic conditions at the site. Specifically, quarterly sampling event ground water potentiometric surface maps showing ground water flow directions in the uppermost aquifer were not submitted with the 1993 Annual Report. Only the July 1993 sampling event map was submitted.

In addition, National Electrical Carbon Corporation has failed to provide a map or narrative description defining the extent of the contaminant plume and calculations for determining the rate of migration of the contaminants, in the 1993 Annual Report.

Deficiencies

The following deficiencies are observations noted during the CME site inspection regarding sampling procedures and maintenance of the ground water monitoring system.

- 1) None of the wells are labelled. All of the monitoring wells should be labeled or numbered for identification.
- 2) The outer lockable protective steel pipes are rusting and in need of maintenance. They should be painted.

- 3) The concrete pads surrounding and supporting the lockable protective steel pipes at wells DH-1, 2 and 3 are cracked and in disrepair. Well DH-4 has no discernable concrete pad and may be below grade. The concrete pads are an integral part of the monitoring well system and are used to seal the well from surface runoff. The concrete pads should be replaced/installed above grade, around all of the wells.
- 4) No observable reference marks, to be used for water level measurements, were noted on any of the monitoring wells. However, all measurements for ground water elevations were made consistently from the top of the inner well casing next to the hinge on the outer lockable protective steel casing. To ensure future consistency in ground water elevation measurement, reference marks should be placed on the monitoring wells.
- 5) Since well DH-4 is close to the access road at the rear of Building 72, NECC should install guard barriers to protect the well from damage.

APPENDICES

APPENDIX A

**COMPREHENSIVE GROUND WATER MONITORING
EVALUATION WORKSHEET**

APPENDIX A

COMPREHENSIVE GROUND-WATER MONITORING
EVALUATION WORKSHEET

The following worksheets have been designed to assist the enforcement officer/technical reviewer in evaluating the ground-water monitoring system an owner/operator uses to collect and analyze samples of ground water. The focus of the worksheets is technical adequacy as it relates to obtaining and analyzing representative samples of ground water. The basis of the worksheets is the final RCRA Ground Water Monitoring Technical Enforcement Guidance Document which describes in detail the aspects of ground-water monitoring which EPA deems essential to meet the goals of RCRA. Appendix A is not a regulatory checklist. Specific technical deficiencies in the monitoring system can, however, be related to the regulations as illustrated in Figure 4.3 taken from the RCRA Ground-Water Monitoring Compliance Order Guide (COG) (included at the end of the appendix). The enforcement officer, in developing an enforcement order, should relate the technical assessment from the worksheets to the regulations using Figure 4.3 from the COG as a guide.

Comprehensive Ground-Water Monitoring Evaluation	Y/N
I. Office Evaluation Technical Evaluation of the Design of the Ground-Water Monitoring System	
A. Review of Relevant Documents	
1. What documents were obtained prior to conducting the inspection:	
a. RCRA Part A permit application?	N
b. RCRA Part B permit application?	N
c. Correspondence between the owner/operator and appropriate agencies or citizen's groups?	N
d. Previously conducted facility inspection reports?	N
e. Facility's contractor reports?	Y
f. Regional hydrogeologic, geologic, or soil reports?	Y
g. The facility's Sampling and Analysis Plan?	Y
h. Ground-water Assessment Program Outline (or Plan, if the facility is in assessment monitoring)?	Y
i. Other (specify) <u>Amended Closure Report, Closure Certification Report</u>	

Y = YES

N = NO

N/A = NOT APPLICABLE

N S = NOT SPECIFIED

* = COMMENT NUMBER

OWPE
A-1

	Y/N
B. Evaluation of the Owner/Operator's Hydrogeologic Assessment	
1. Did the owner/operator use the following direct techniques in the hydrogeologic assessment:	
a. Logs of the soil borings/rock corings (documented by a professional geologist, soil scientist, or geotechnical engineer)?	Y
b. Materials tests (e.g., grain-size analyses, standard penetration tests, etc.)?	Y
c. Piezometer installation for water level measurements at different depths?	Y
d. Slug tests?	N
e. Pump tests?	C-1
f. Geochemical analyses of soil samples?	N
g. Other (specify) (e.g., hydrochemical diagrams and wash analysis) <i>Bailing tests</i>	Y
2. Did the owner/operator use the following indirect techniques to supplement direct technique data:	N
a. Geophysical well logs?	
b. Tracer studies?	
c. Resistivity and/or electromagnetic conductance?	
d. Seismic Survey?	
e. Hydraulic conductivity measurements of cores?	
f. Aerial photography?	
g. Ground penetrating radar?	
h. Other (specify)	↓
3. Did the owner/operator document and present the raw data from the site hydrogeologic assessment?	Y
4. Did the owner/operator document methods (criteria) used to correlate and analyze the information?	Y
5. Did the owner/operator prepare the following:	
a. Narrative description of geology?	Y
b. Geologic cross sections?	Y
c. Geologic and soil maps?	N
d. Boring/coring logs?	Y
e. Structure contour maps of the differing water bearing zone and confining layers?	N
f. Narrative description and calculation of ground-water flows?	Y

	Y/N
g. Water table/potentiometric map?	Y
h. Hydrologic cross sections?	Y
6. Did the owner/operator obtain a regional map of the area and delineate the facility?	Y
If yes, does this map illustrate:	
a. Surficial geology features?	Y
b. Streams, rivers, lakes, or wetlands near the facility?	Y
c. Discharging or recharging wells near the facility?	C-2
7. Did the owner/operator obtain a regional hydrogeologic map?	Y
If yes, does this hydrogeologic map indicate:	
a. Major areas of recharge/discharge?	N
b. Regional ground-water flow direction?	N
c. Potentiometric contours which are consistent with observed water level elevations?	Y
8. Did the owner/operator prepare a facility site map?	Y
If yes, does the site map show:	
a. Regulated units of the facility (e.g., landfill areas, impoundments)?	Y
b. Any seeps, springs, streams, ponds, or wetlands?	N
c. Location of monitoring wells, soil borings, or test pits?	Y
d. How many regulated units does the facility have? <u>one</u>	
If more than one regulated unit then,	
• Does the waste management area encompass all regulated units?	N/A
• Is a waste management area delineated for each regulated unit?	N/A
C. Characterization of Subsurface Geology of Site	
1. Soil boring/test pit program:	
a. Were the soil borings/test pits performed under the supervision of a qualified professional?	Y
b. Did the owner/operator provide documentation for selecting the spacing for borings?	Y
c. Were the borings drilled to the depth of the first confining unit below the uppermost zone of saturation or ten feet into bedrock?	Y
d. Indicate the method(s) of drilling:	
Hollow Stem Auger	

	Y/N
Auger (hollow or solid stem) <u> X </u>	
Mud rotary <u> </u>	
Reverse rotary <u> </u>	
Cable tool <u> </u>	
Jetting <u> </u>	
Other (specify) <u> </u>	
e. Were continuous sample corings taken?	Y
f. How were the samples obtained (check method[s])	
• Split spoon <u> X </u>	
• Shelby tube, or similar <u> X </u>	
• Rock coring <u> </u>	
• Ditch sampling <u> </u>	
• Other (explain) <u> </u>	
g. Were the continuous sample corings logged by a qualified professional in geology?	Y
h. Does the field boring log include the following information:	
• Hole name/number?	Y
• Date started and finished?	Y
• Driller's name?	Y
• Hole location (i.e., map and elevation)?	N
• Drill rig type and bit/auger size?	Y
• Gross petrography (e.g., rock type) of each geologic unit?	Y
• Gross mineralogy of each geologic unit?	N
• Gross structural interpretation of each geologic unit and structural features (e.g., fractures, gouge material, solution channels, buried streams or valleys, identification of depositional material)?	Y
• Development of soil zones and vertical extent and description of soil type?	N
• Depth of water bearing unit(s) and vertical extent of each?	Y
• Depth and reason for termination of borehole?	Y
• Depth and location of any contaminant encountered in borehole?	N
• Sample location/number?	Y
• Percent sample recovery?	Y
• Narrative descriptions of:	
—Geologic observations?	Y
—Drilling observations?	N
i. Were the following analytical tests performed on the core samples:	
• Mineralogy (e.g., microscopic tests and x-ray diffraction)?	N
• Petrographic analysis:	
—degree of crystallinity and cementation of matrix?	N
—degree of sorting, size fraction (i.e., sieving), textural variations?	Y
—rock type(s)?	Y

	Y/N
—soil type?	N
—approximate bulk geochemistry?	N
—existence of microstructures that may effect or indicate fluid flow?	Y
• Falling head tests?	N
• Static head tests?	N
• Settling measurements?	N
• Centrifuge tests?	N
• Column drawings?	N
D. Verification of Subsurface Geological Data	
1. Has the owner/operator used indirect geophysical methods to supplement geological conditions between borehole locations?	N
2. Do the number of borings and analytical data indicate that the confining layer displays a low enough permeability to impede the migration of contaminants to any stratigraphically lower water-bearing units?	Y
3. Is the confining layer laterally continuous across the entire site?	Y
4. Did the owner/operator consider the chemical compatibility of the site-specific waste types and the geologic materials of the confining layer?	N
5. Did the geologic assessment address or provide means for resolution of any information gaps of geologic data?	N
6. Do the laboratory data corroborate the field data for petrography?	NS
7. Do the laboratory data corroborate the field data for mineralogy and subsurface geochemistry?	NS
E. Presentation of Geologic Data	
1. Did the owner/operator present geologic cross sections of the site?	Y
2. Do cross sections:	
a. identify the types and characteristics of the geologic materials present?	Y
b. define the contact zones between different geologic materials?	Y
c. note the zones of high permeability or fracture?	Y
d. give detailed borehole information including:	

	Y/N
• location of borehole?	Y
• depth of termination?	Y
• location of screen (if applicable)?	Y
• depth of zone(s) of saturation?	Y
• backfill procedure?	Y
3. Did the owner/operator provide a topographic map which was constructed by a licensed surveyor?	C-3 ↓
4. Does the topographic map provide:	
a. contours at a maximum interval of two-feet?	
b. locations and illustrations of man-made features (e.g., parking lots, factory buildings, drainage ditches, storm drain, pipelines, etc.)?	Y
c. descriptions of nearby water bodies?	N
d. descriptions of off-site wells?	N
e. site boundaries?	Y
f. individual RCRA units?	Y
g. delineation of the waste management area(s)?	Y
h. well and boring locations?	Y
5. Did the owner/operator provide an aerial photograph depicting the site and adjacent off-site features?	N
6. Does the photograph clearly show surface water bodies, adjacent municipalities, and residences and are these clearly labelled?	N/A
F. Identification of Ground-Water Flowpaths	
1. Ground-water flow direction	
a. Was the well casing height measured by a licensed surveyor to the nearest 0.01 foot?	Y
b. Were the well water level measurements taken within a 24 hour period?	C-4
c. Were the well water level measurements taken to the nearest 0.01 foot?	Y
d. Were the well water levels allowed to stabilize after construction and development for a minimum of 24 hours prior to measurements?	C-5
e. Was the water level information obtained from (check appropriate one):	
• multiple piezometers placed in single borehole? _____	
• vertically nested piezometers in closely spaced separate boreholes? _____	
• monitoring wells? _____	X

	Y/N
e. Did the owner/operator implement means for gauging long term effects on water movement that may result from on-site or off-site construction or changes in land-use patterns?	C-8
3. Hydraulic conductivity	
a. How were hydraulic conductivities of the subsurface materials determined?	
• Single-well tests (slug tests)?	N
• Multiple-well tests (pump tests)	Y
• Other (specify) <u>Packer tests on bedrock, single well bailing tests</u>	
b. If single-well tests were conducted, were they done by:	
• Adding or removing a known volume of water?	Y
• Pressurizing well casing?	N
c. If single well tests were conducted in a highly permeable formation, were pressure transducers and high-speed recording equipment used to record the rapidly changing water levels?	N
d. Since single well tests only measure hydraulic conductivity in a limited area, were enough tests run to ensure a representative measure of conductivity in each hydrogeologic unit?	Y
e. Are the owner/operator's slug test data (if applicable) consistent with existing geologic information (e.g., boring logs)?	N/A
f. Were other hydraulic conductivity properties determined?	Y
g. If yes, provide any of the following data, if available:	
• Transmissivity <u>X</u>	
• Storage coefficient <u> </u>	
• Leakage <u> </u>	
• Permeability <u> </u>	
• Porosity <u> </u>	
• Specific capacity <u> </u>	
• Other (specify) <u> </u>	
4. Identification of the uppermost aquifer	
a. Has the extent of the uppermost saturated zone (aquifer) in the facility area been defined? If yes,	Y
• Are soil boring/test pit logs included?	Y
• Are geologic cross-sections included?	Y
b. Is there evidence of confining (competent, unfractured, continuous, and low permeability) layers beneath the site? If yes,	Y
• how was continuity demonstrated? <u>Boring Logs</u>	
c. What is the hydraulic conductivity of the confining unit? (cm/sec.)	NS
d. How was it determined?	NS

	Y/N
<p>e. Does potential for other hydraulic communication exist (e.g., lateral discontinuity between geologic units, facies changes, fracture zones, cross cutting structures, or chemical corrosion/alteration of geologic units by leachate)? If yes or no, what is the rationale?</p> <p><u>No. Boring Logs indicate a thick competent clay layer beneath and above the uppermost aquifer</u></p>	N
<p>G. Office Evaluation of the Facility's Ground-Water Monitoring System—Monitoring Well Design and Construction:</p> <p>These questions should be answered for each different well design present at the facility.</p> <p>1. Drilling Methods</p> <p>a. What drilling method was used for the well?</p> <ul style="list-style-type: none"> • Hollow-stem auger <input checked="" type="checkbox"/> • Solid-stem auger <input type="checkbox"/> • Mud rotary (water) <input type="checkbox"/> • Air rotary <input type="checkbox"/> • Reverse rotary <input type="checkbox"/> • Cable tool <input type="checkbox"/> • Jetting <input type="checkbox"/> • Air drill w/ casing hammer <input type="checkbox"/> • Other (specify) _____ 	
<p>b. Were any cutting fluids (including water) or additives used during drilling? If yes, specify:</p> <ul style="list-style-type: none"> • Type of drilling fluid _____ • Source of water used _____ • Foam _____ • Polymers _____ • Other _____ 	N
c. Was the cutting fluid, or additive, identified?	N
<p>d. Was the drilling equipment steam-cleaned prior to drilling the well?</p> <ul style="list-style-type: none"> • Other methods _____ 	Y
<p>e. Was compressed air used during drilling? If yes,</p> <ul style="list-style-type: none"> • was the air filtered to remove oil? 	N
<p>f. Did the owner/operator document procedure for establishing the potentiometric surface? If yes,</p> <ul style="list-style-type: none"> • how was the location established? 	N
g. Formation samples	Y

	Y/N												
• Were formation samples collected initially during drilling?	Y												
• Were any cores taken continuously?	Y												
• If not, at what interval were samples taken?													
• How were the samples obtained? <input checked="" type="checkbox"/> Split spoon <input type="checkbox"/> Shelby tube <input type="checkbox"/> Core drill <input type="checkbox"/> Other (specify)													
• Identify if any physical and/or chemical tests were performed on the formation samples (specify) <hr/> <hr/> <hr/>	N												
2. Monitoring Well Construction Materials													
a. Identify construction materials (by number) and diameters (ID/OD)													
	<table border="0"> <thead> <tr> <th></th> <th><u>Material</u></th> <th><u>Diameter</u></th> </tr> </thead> <tbody> <tr> <td>• Primary Casing</td> <td><u>PVC</u></td> <td><u>2" OD</u></td> </tr> <tr> <td>• Secondary or outside casing (double construction)</td> <td><u>Steel</u></td> <td><u>6" OD</u></td> </tr> <tr> <td>• Screen</td> <td><u>PVC</u></td> <td><u>2" OD</u></td> </tr> </tbody> </table>		<u>Material</u>	<u>Diameter</u>	• Primary Casing	<u>PVC</u>	<u>2" OD</u>	• Secondary or outside casing (double construction)	<u>Steel</u>	<u>6" OD</u>	• Screen	<u>PVC</u>	<u>2" OD</u>
	<u>Material</u>	<u>Diameter</u>											
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• Secondary or outside casing (double construction)	<u>Steel</u>	<u>6" OD</u>											
• Screen	<u>PVC</u>	<u>2" OD</u>											
b. How are the sections of casing and screen connected?													
• Pipe sections threaded	Y												
• Couplings (friction) with adhesive or solvent	-												
• Couplings (friction) with retainer screws	-												
• Other (specify)	-												
c. Were the materials steam-cleaned prior to installation?													
• If no, how were the materials cleaned? _____	Y												
3. Well Intake Design and Well Development													
a. Was a well intake screen installed?													
Y													
• What is the length of the screen for the well? <u>DH-1, 2, 3 → 5 ft. DH-4 → 2.5 ft</u>													
• Is the screen manufactured?													
Y													
b. Was a filter pack installed?													
Y													
• What kind of filter pack was employed? <u>DH-1, 2, 3 → Silica Sand DH-4 → #4 Parry Sand</u>													
• Is the filter pack compatible with formation materials?													
Y													
• How was the filter pack installed?													
NS													

	Y/N
• What are the dimensions of the filter pack? DH-1, 2, 3 → 8.25" x 7' DH-4 → 8.25" x 4'	
• Has a turbidity measurement of the well water ever been made?	Y
• Have the filter pack and screen been designed for the in-situ materials?	Y
c. Well development	
• Was the well developed?	Y
• What technique was used for well development? —Surge block —Bailer —Air surging —Water pumping X Other (specify) <u>Water Surge & Bail</u>	
4. Annular Space Seals	
a. What is the annular space in the saturated zone directly above the filter pack filled with: X Sodium bentonite (specify type and grit) - <u>Pellets</u> —Cement (specify neat or concrete) —Other (specify)	
b. Was the seal installed by: —Dropping material down the hole and tamping X Dropping material down the inside of hollow-stem auger —Tremie pipe method —Other (specify)	
c. Was a different seal used in the unsaturated zone? If yes,	C-9
• Was this seal made with? —Sodium bentonite (specify type and grit) —Cement (specify neat or concrete)- Other (specify)	↓
• Was this seal installed by? —Dropping material down the hole and tamping —Dropping material down the inside of hollow stem auger X Other (specify) <u>Tremie Pipe</u>	
d. Is the upper portion of the borehole sealed with a concrete cap to prevent infiltration from the surface?	C-10
e. Is the well fitted with an above-ground protective device and bumper guards?	C-11
f. Has the protective cover been installed with locks to prevent tampering?	Y

	Y/N
H. Evaluation of the Facility's Detection Monitoring Program	N/A
1. Placement of Downgradient Detection Monitoring Wells	
a. Are the ground-water monitoring wells or clusters located immediately adjacent to the waste management area?	
b. How far apart are the detection monitoring wells?	
c. Does the owner/operator provide a rationale for the location of each monitoring well or cluster?	
d. Does the owner/operator identify the well screen lengths of each monitoring well or cluster?	
e. Does the owner/operator provide an explanation for the well screen lengths of each monitoring well or cluster?	
f. Do the actual locations of monitoring wells or clusters correspond to those identified by the owner/operator?	
2. Placement of Upgradient Monitoring Wells	
a. Has the owner/operator documented the location of each upgradient monitoring well or cluster?	
b. Does the owner/operator provide an explanation for the location(s) of the upgradient monitoring wells?	
c. What length screen has the owner/operator employed in the background monitoring well(s)?	
d. Does the owner/operator provide an explanation for the screen length(s) chosen?	
e. Does the actual location of each background monitoring well or cluster correspond to that identified by the owner/operator?	✓
L. Office Evaluation of the Facility's Assessment Monitoring Program	
1. Does the assessment plan specify:	C-12
a. The number, location, and depth of wells?	↓
b. The rationale for their placement and identify the basis that will be used to select subsequent sampling locations and depths in later assessment phases?	✓
2. Does the list of monitoring parameters include all hazardous waste constituents from the facility?	Y

	Y/N
a. Does the water quality parameter list include other important indicators not classified as hazardous waste constituents?	N
b. Does the owner/operator provide documentation for the listed wastes which are not included?	N/A
3. Does the owner/operator's assessment plan specify the procedures to be used to determine the rate of constituent migration in the ground-water?	N
4. Has the owner/operator specified a schedule of implementation in the assessment plan?	Y
5. Have the assessment monitoring objectives been clearly defined in the assessment plan?	Y
a. Does the plan include analysis and/or re-evaluation to determine if significant contamination has occurred in any of the detection monitoring wells?	N
b. Does the plan provide for a comprehensive program of investigation to fully characterize the rate and extent of contaminant migration from the facility?	C-13
c. Does the plan call for determining the concentrations of hazardous wastes and hazardous waste constituents in the ground water?	Y
d. Does the plan employ a quarterly monitoring program?	Y
6. Does the assessment plan identify the investigatory methods that will be used in the assessment phase?	Y
a. Is the role of each method in the evaluation fully described?	Y
b. Does the plan provide sufficient descriptions of the direct methods to be used?	Y
c. Does the plan provide sufficient descriptions of the indirect methods to be used?	N/A
d. Will the method contribute to the further characterization of the contaminant movement?	Y
7. Are the investigatory techniques utilized in the assessment program based on direct methods?	Y
a. Does the assessment approach incorporate indirect methods to further support direct methods?	N
b. Will the planned methods called for in the assessment approach ultimately meet performance standards for assessment monitoring?	C-14
c. Are the procedures well defined?	Y
d. Does the approach provide for monitoring wells similar in design and construction as the detection monitoring wells?	Y

	Y/N
e. Does the approach employ taking samples during drilling or collecting core samples for further analysis?	Y
8. Are the indirect methods to be used based on reliable and accepted geophysical techniques?	N/A
a. Are they capable of detecting subsurface changes resulting from contaminant migration at the site?	↓
b. Is the measurement at an appropriate level of sensitivity to detect ground-water quality changes at the site?	
c. Is the method appropriate considering the nature of the subsurface materials?	
d. Does the approach consider the limitations of these methods?	
e. Will the extent of contamination and constituent concentration be based on direct methods and sound engineering judgment? (Using indirect methods to substantiate the findings.)	
9. Does the assessment approach incorporate any mathematical modeling to predict contaminant movement?	N
a. Will site specific measurements be utilized to accurately portray the subsurface?	↓
b. Will the derived data be reliable?	
c. Have the assumptions been identified?	
d. Have the physical and chemical properties of the site specific wastes and hazardous waste constituents been identified?	
J. Conclusions	
1. Subsurface geology	
a. Have sufficient data been collected to adequately define petrography and petrographic variation?	Y
b. Has the subsurface geochemistry been adequately defined?	N/A
c. Was the boring/coring program adequate to define subsurface geologic variation?	Y
d. Was the owner/operator's narrative description complete and accurate in its interpretation of the data?	Y
e. Does the geologic assessment address or provide means to resolve any information gaps?	Y
2. Ground-water flowpaths	
a. Did the owner/operator adequately establish the horizontal and vertical components of ground water flow?	C-15

	Y/N
b. Were appropriate methods used to establish ground-water flowpaths?	Y
c. Did the owner/operator provide accurate documentation?	Y
d. Are the potentiometric surface measurements valid?	Y
e. Did the owner/operator adequately consider the seasonal and temporal effects on the ground-water?	C-16
f. Were sufficient hydraulic conductivity tests performed to document lateral and vertical variation in hydraulic conductivity in the entire hydrogeologic subsurface below the site?	Y
3. Uppermost Aquifer	
a. Did the owner/operator adequately define the upper-most aquifer?	Y
4. Monitoring Well Construction and Design	
a. Do the design and construction of the owner/operator's ground-water monitoring wells permit depth discrete ground-water samples to be taken?	Y
b. Are the samples representative of ground-water quality?	Y
c. Are the ground-water monitoring wells structurally stable?	Y
d. Does the ground-water monitoring well's design and construction permit an accurate assessment of aquifer characteristics?	Y
5. Detection Monitoring	C-17
a. Downgradient Wells <ul style="list-style-type: none"> Do the location, and screen lengths of the ground-water monitoring wells or clusters in the detection monitoring system allow the immediate detection of a release of hazardous waste or constituents from the hazardous waste management area to the uppermost aquifer? 	↓
b. Upgradient Wells <ul style="list-style-type: none"> Do the location and screen lengths of the upgradient (background) ground-water monitoring wells ensure the capability of collecting ground-water samples representative of upgradient (background) ground-water quality including any ambient heterogeneous chemical characteristics? 	
6. Assessment Monitoring	Y
a. Has the owner/operator adequately characterized site hydrogeology to determine contaminant migration?	
b. Is the detection monitoring system adequately designed and constructed to immediately detect any contaminant release?	C-18

	Y/N
c. Are the procedures used to make a first determination of contamination adequate?	Y
d. Is the assessment plan adequate to detect, characterize, and track contaminant migration?	C-19
e. Will the assessment monitoring wells, given site hydrogeologic conditions, define the extent and concentration of contamination in the horizontal and vertical planes?	Y
f. Are the assessment monitoring wells adequately designed and constructed?	Y
g. Are the sampling and analysis procedures adequate to provide a true measurement of contamination?	Y
h. Do the procedures used for evaluation of assessment monitoring data result in determinations of the rate of migration, extent of migration, and hazardous constituent composition of the contaminant plume?	C-20
i. Are the data collected at sufficient frequency and duration to adequately determine the rate of migration?	Y
j. Is the schedule of implementation adequate?	Y
k. Is the owner/operator's assessment monitoring plan adequate?	C-21
• If the owner/operator had to implement his assessment monitoring plan was it implemented satisfactorily?	Y
II. Field Evaluation	
A. Ground-Water Monitoring System	
1. Are the numbers, depths, and locations of monitoring wells in agreement with those reported in the facility's monitoring plan? (See Section 3.2.3.)	Y
B. Monitoring Well Construction	
1. Identify construction material, material diameter	
a. Primary Casing <u>Polyvinyl Chloride (PVC)</u> <u>2" OD</u>	
b. Secondary or outside casing <u>Steel</u> <u>6" OD</u>	
2. Is the upper portion of the borehole sealed with concrete to prevent infiltration from the surface?	C-22
3. Is the well fitted with an above-ground protective device?	C-23
4. Is the protective cover fitted with locks to prevent tampering? If a facility utilizes more than a single well design, answer the above questions for each well design?	Y

	Y/N
III. Review of Sample Collection Procedures	
A. Measurement of Well Depths /Elevation	
1. Are measurements of both depth to standing water and depth to the bottom of the well made?	Y
2. Are measurements taken to the 0.01 foot?	Y
3. What device is used? <i>electric tape</i>	
4. Is there a reference point established by a licensed surveyor?	C-24
5. Is the measuring equipment properly cleaned between well locations to prevent cross contamination?	Y
B. Detection of Immiscible Layers	N/A
1. Are procedures used which will detect light phase immiscible layers?	↓
2. Are procedures used which will detect heavy phase immiscible layers?	↓
C. Sampling of Immiscible Layers	N/A
1. Are the immiscible layers sampled separately prior to well evacuation?	↓
2. Do the procedures used minimize mixing with water soluble phases?	↓
D. Well Evacuation	
1. Are low yielding wells evacuated to dryness?	Y
2. Are high yielding wells evacuated so that at least three casing volumes are removed?	Y
3. What device is used to evacuate the wells? <i>Dedicated Disposable Polyethylene Bailers</i>	
4. If any problems are encountered (e.g., equipment malfunction) are they noted in a field logbook?	C-25

	Y/N
E. Sample Withdrawal	
1. For low yielding wells, are samples for volatiles, pH, and oxidation/reduction potential drawn first after the well recovers?	Y
2. Are samples withdrawn with either fluoro carbon/resins or stainless steel (316, 304 or 2205) sampling devices?	C-26
3. Are sampling devices either bottom valve bailers or positive gas displacement bladder pumps?	
4. If bailers are used, is fluorocarbon/resin coated wire, single strand stainless steel wire, or monofilament used to raise and lower the bailer?	
5. If bladder pumps are used, are they operated in a continuous manner to prevent aeration of the sample?	
6. If bailers are used, are they lowered slowly to prevent degassing of the water?	
7. If bailers are used, are the contents transferred to the sample container in a way that minimizes agitation and aeration?	
8. Is care taken to avoid placing clean sampling equipment on the ground or other contaminated surfaces prior to insertion into the well?	Y
9. If dedicated sampling equipment is not used, is equipment disassembled and thoroughly cleaned between samples?	N/A
10. If samples are for inorganic analysis, does the cleaning procedure include the following sequential steps: a. Nonphosphate detergent wash? b. Dilute acid rinse (HNO_3 or HCl)? c. Tap water rinse? d. Type II reagent grade water?	N/A
11. If samples are for organic analysis, does the cleaning procedure include the following sequential steps: a. Nonphosphate detergent wash?	C-27
b. Tap water rinse?	
c. Distilled/deionized water rinse?	
d. Acetone rinse?	
e. Pesticide-grade hexane rinse?	

	Y/N
12. Is sampling equipment thoroughly dry before use?	Y
13. Are equipment blanks taken to ensure that sample cross-contamination has not occurred?	Y
14. If volatile samples are taken with a positive gas displacement bladder pump, are pumping rates below 100 ml/min?	N/A
F. In-situ or Field Analyses	
1. Are the following labile (chemically unstable) parameters determined in the field:	
a. pH?	Y
b. Temperature?	Y
c. Specific conductivity?	Y
d. Redox potential?	N
e. Chlorine?	N
f. Dissolved oxygen?	Y
g. Turbidity?	Y
h. Other (specify) _____	-
2. For in-situ determinations, are they made after well evacuation and sample removal?	N/A
3. If sample is withdrawn from the well, is parameter measured from a split portion?	Y
4. Are monitoring equipment calibrated according to manufacturer's specifications and consistent with SW-846?	Y
5. Are the date, procedure, and maintenance for equipment calibration documented in the field logbook?	C-28
IV. Review of Sample Preservation and Handling Procedures	
A. Sample Containers	Y
1. Are samples transferred from the sampling device directly to their compatible containers?	

	Y/N
2. Are sample containers for metals (inorganics) analyses polyethylene with polypropylene caps?	N/A
3. Are sample containers for organics analysis glass bottles with fluorocarbonresin-lined caps?	C - 29
4. If glass bottles are used for metals samples are the caps fluorocarbonresin-lined?	N/A
5. Are the sample containers for metal analyses cleaned using these sequential steps:	N/A
a. Nonphosphate detergent wash?	↓
b. 1:1 nitric acid rinse?	
c. Tap water rinse?	
d. 1:1 hydrochloric acid rinse?	
e. Tap water rinse?	
f. Distilled/deionized water rinse?	
6. Are the sample containers for organic analyses cleaned using these sequential steps:	C - 30
a. Nonphosphate detergent/hot water wash?	↓
b. Tap water rinse?	
c. Distilled/deionized water rinse?	
d. Acetone rinse?	
e. Pesticide-grade hexane rinse?	
7. Are trip blanks used for each sample container type to verify cleanliness?	Y
B. Sample Preservation Procedures	
1. Are samples for the following analyses cooled to 4°C:	N/A
a. TOC?	↓
b. TOX?	
c. Chloride?	
d. Phenols?	
e. Sulfate?	
f. Nitrate?	
g. Coliform bacteria?	
h. Cyanide?	
i. Oil and grease?	
j. Hazardous constituents (261, Appendix VIII)	

	Y/N
2. Are samples for the following analyses field acidified to pH <2 with HNO ₃ :	
a. Iron?	N/A
b. Manganese?	
c. Sodium?	
d. Total metals?	
e. Dissolved metals?	
f. Fluoride?	
g. Endrin?	
h. Lindane?	
i. Methoxychlor?	
j. Toxaphene?	
k. 2,4, D?	
l. 2,4,5 TP Silvex?	
m. Radium?	
n. Gross alpha?	
o. Gross beta?	
3. Are samples for the following analyses field acidified to pH <2 with H ₂ SO ₄ :	
a. Phenols?	
b. Oil and grease?	
4. Is the sample for TOC analysis field acidified to pH <2 with HCl?	
5. Is the sample for TOX analysis preserved with 1 ml of 1.1 M sodium sulfite?	
6. Is the sample for cyanide analysis preserved with NaOH to pH >12?	↓
C. Special Handling Considerations	
1. Are organic samples handled without filtering?	Y
2. Are samples for volatile organics transferred to the appropriate vials to eliminate headspace over the sample?	Y
3. Are samples for metal analysis split into two portions?	N/A
4. Is the sample for dissolved metals filtered through a 0.45 micron filter?	↓
5. Is the second portion not filtered and analyzed for total metals?	↓
6. Is one equipment blank prepared each day of ground-water sampling?	Y

	Y/N
V. Review of Chain-of-Custody Procedures	
A. Sample Labels	
1. Are sample labels used?	Y
2. Do they provide the following information:	Y
a. Sample identification number?	↓
b. Name of collector?	
c. Date and time of collection?	
d. Place of collection?	
e. Parameter(s) requested and preservatives used?	
3. Do they remain legible even if wet?	↓
B. Sample Seals	C-31
1. Are sample seals placed on those containers to ensure samples are not altered?	
C. Field Logbook	C-32
1. Is a field logbook maintained?	
2. Does it document the following:	
a. Purpose of sampling (e.g., detection or assessment)?	Y
b. Location of well(s)?	Y
c. Total depth of each well?	Y
d. Static water level depth and measurement technique?	Y
e. Presence of immiscible layers and detection method?	N/A
f. Collection method for immiscible layers and sample identification numbers?	N/A
g. Well evacuation procedures?	Y
h. Sample withdrawal procedure?	Y
i. Date and time of collection?	Y
j. Well sampling sequence?	Y
k. Types of sample containers and sample identification number(s)?	Y
l. Preservative(s) used?	Y
m. Parameters requested?	N/S
n. Field analysis data and method(s)?	Y
o. Sample distribution and transporter?	NS
p. Field observations?	Y

	Y/N
—Unusual well recharge rates?	N/S
—Equipment malfunction(s)?	Y
—Possible sample contamination?	NS
—Sampling rate?	Y
D. Chain-of-Custody Record	C-33
1. Is a chain-of-custody record included with each sample?	
2. Does it document the following:	
a. Sample number?	Y
b. Signature of collector?	
c. Date and time of collection?	
d. Sample type?	
e. Station location?	
f. Number of containers?	
g. Parameters requested?	
h. Signatures of persons involved in chain-of-custody?	
i. Inclusive dates of custody?	↓
E. Sample Analysis Request Sheet	C-33
1. Does a sample analysis request sheet accompany each sample?	
2. Does the request sheet document the following:	
a. Name of person receiving the sample?	Y
b. Date of sample receipt?	Y
c. Duplicates?	Y
d. Analysis to be performed?	Y
VI. Review of Quality Assurance/Quality Control	C-34
A. Is the validity and reliability of the laboratory and field generated data ensured by a QA/QC program?	
B. Does the QA/QC program include:	
1. Documentation of any deviation from approved procedures?	↓

	Y/N
2. Documentation of analytical results for:	
a. Blanks?	Y
b. Standards?	NS
c. Duplicates?	Y
d. Spiked samples?	NS
e. Detectable limits for each parameter being analyzed?	Y
C. Are approved statistical methods used?	C-35
D. Are QC samples used to correct data?	
E. Is all data critically examined to ensure it has been properly calculated and reported?	
VII. Surficial Well Inspection and Field Observation	
A. Are the wells adequately maintained?	C-36
B. Are the monitoring wells protected and secure?	
C. Do the wells have surveyed casing elevations?	Y
D. Are the ground-water samples turbid?	N
E. Have all physical characteristics of the site been noted in the inspector's field notes (i.e., surface waters, topography, surface features)?	Y
F. Has a site sketch been prepared by the field inspector with scale, north arrow, location(s) of buildings, location(s) of regulated units, locations of monitoring wells, and a rough depiction of the site drainage pattern?	Y

	Y/N
VIII. Conclusions	
A. Is the facility currently operating under the correct monitoring program according to the statistical analyses performed by the current operator?	C-37
B. Does the ground-water monitoring system, as designed and operated, allow for detection or assessment of any possible ground-water contamination caused by the facility?	Y
C. Does the sampling and analysis procedure permit the owner/operator to detect and, where possible, assess the nature and extent of a release of hazardous constituents to ground water from the monitored hazardous waste management facility?	Y

Comments to Appendix A

I. Office Evaluation

C - 1

B.1.e. Pumping tests on the bedrock aquifer were performed and included packer tests.

C - 2

B.6.c. A narrative description of the ground water production wells west and north of the facility was provided.

C - 3

E.3. A plat map of the site was provided indicating elevations of the wells and other surficial features. However, a topographic map, with two foot contour intervals, was not depicted.

C - 4

F.1.b. Static ground water elevations were recorded. It was not specified if they were taken within 24 hours.

C - 5

F.1.d. See comment C-4 above.

C - 6

F.1.k. Flow nets were not constructed.

C - 7

F.2.a. Fluctuations in the static ground water elevations do occur. However, they are very slight. See Table 1 in the text of the CME. These variations may be a result of the pumping from the site's ground water recovery system.

C - 8

F.2.e. The ground water recovery system has produced a long term effect on the ground water movement in the uppermost aquifer at the site.

C - 9

G.3.c. Wells DH-1, 2, and 3 have a 2% bentonite-cement grout. Well DH-4 is sealed exclusively with bentonite pellets.

C - 10

G.3.d. Concrete pads were installed but they are in disrepair. Refer to the discussion of monitoring well maintenance in Chapter IV.

C - 11

G.3.e. Protective steel guard pipes are in place around the primary well casing. Bumper guards are not in place.

Comments to Appendix A (cont.)

C - 12

I.1.a. The number, location and depth of the wells was based on the analysis of the HydroPunch^R survey discussed in the GWQAP. See Chapter VII for a discussion of the Assessment Monitoring System.

C - 13

I.5.b. The plan does include a program for the determination of extent of the contamination, but it does not address the determination of the rate of migration of the contaminants.

C - 14

I.7.b. No, they will not, since the methods do not address the determination of the rate of migration of the contaminants.

C - 15

J.2.a. Monitoring well clusters, installed in the mid-1980's, have wells drilled to different depths to establish vertical and horizontal flows. See Figure 2 in the CME text for the location of the clusters.

C - 16

J.2.e. The installed ground water recovery system effects ground water flow enough to make interpretation of seasonal and temporal effects difficult.

C - 17

J.5.a. A detection monitoring system, per se, was not installed. Monitoring wells were installed for assessment monitoring activities.

C - 18

J.6.b. See comment C - 17.

C - 19

J.6.d. The ground water quality assessment plan is not adequate to detect, characterize, and track the contaminant migration, since a discussion and/or calculations to determine the rate of migration are not included in the plan.

C - 20

J.6.h. See comment C - 19.

C - 21

J.6.k. See comment C - 19.

Comments to Appendix A (cont.)

II. Field Evaluation

C - 22

- B.2. Concrete pads were installed at the time of construction. However, the pads have cracked and deteriorated and should be replaced. See Table 3, in the CME, for details.

C - 23

- B.3. Guard posts should be installed around monitoring well DH-4 due to its close proximity to the access road behind Building 72

III. Review of Sample Collection Procedures

C - 24

- A.4. Reference points were not noted on the inner well casings. However, all well tops are level and depth measurements are taken consistently from the top of the inner casing next to the hinge on the outer well casing. See Table 3 for details.

C - 25

- D. 4. The field logbook is maintained by the sampling personnel and is used to log sampling data and any irregularities during sampling activities. The field logbook is not maintained on site.

C - 26

- E.2. Samples are withdrawn using dedicated disposal polyethylene bailers with "VOC" tips. A full discussion of the sampling is addressed in Chapter V of the CME text.

C - 27

- E. 11. New dedicated disposal polyethylene bailers with 'VOC' tips are used thereby voiding the necessity of cleaning. New 40 milliliter glass vials with teflon septa/caps are used for the samples.

C - 28

- F.5. See comment C - 25.

IV. Review of Sample Preservation and Handling Procedures

C - 29

- A.3. The SAP does not specify the containers to be used for VOC analyses. However, during observation of the December 12, 1994 sampling event it was noted that 40 ml glass vials with teflon septa were used.

Comments to Appendix A (cont.)

C - 30

A.6. See Comment C - 27

V. Review of Chain of Custody Procedures

C - 31

B.1. Individual sample containers were not "sample sealed", the transporting cooler was "sample sealed" and delivered by overland freight to the laboratory for analysis.

C - 32

C.1. A field logbook is not maintained on site. However, observation of the sampling event of December 12, 1994 indicates that a field logbook is maintained by the sampling personnel.

C - 33

E.1. A sample analysis request form does not accompany each sample. A chain of custody form is used as the sample analysis request form.

VI. Review of Quality Assurance/Quality Control

C - 34

A. A QA/QC program for NECC's contracted laboratory was not reviewed. However, QA/QC is maintained for field generated data by use of field, trip, duplicate, and split blanks. Additionally, the quarterly assessment analytical results list surrogate analytical compounds and their recovery percentages.

C - 35

C. A QA/QC program for NECC's contracted laboratory was not reviewed. Therefore, it is unknown if approved statistics are used to analyze the data.

VII. Surficial Well Inspection and Field Observation

C - 36

A & B Concrete pads are cracked and in disrepair around wells DH-1, 2, and 3. No discernable concrete pad is noted around well DH-4. Concrete pads should be repaired and installed around wells DH-1, 2, 3, and 4 respectively. Additionally, guard barriers should be installed near DH-4 due to its proximity to the access road behind Building 72.

Comments to Appendix A (cont.)

VIII. Conclusions

C - 37

- A. NECC is currently operating under the correct monitoring program. However, NECC entered into assessment monitoring as a result of closure activities and not by statistical triggering from detection monitoring.

APPENDIX A-1

**FACILITY INSPECTION FORM FOR COMPLIANCE WITH INTERIM
STATUS GROUND WATER MONITORING STANDARDS**

APPENDIX A-1

FACILITY INSPECTION FORM FOR COMPLIANCE WITH INTERIM
STATUS STANDARDS COVERING GROUND-WATER

Company National Electrical Carbon Corporation EPA I.D. Number OH004167219

Company Address: 200 North Town St., Fostoria, Ohio (Seneca County)

Company Contact/Official: R. Michael Wentzel Title: Manager - Health,
Safety, Environment

Date of Inspection: December 12, 1994

Inspector's Name: George Stuckey

Branch/Organization: OEPA/DDAGW/NWDO

Type of Facility: (check appropriately)	Y/N
a) surface impoundment	N
b) landfill	Y
c) land treatment facility	N
Ground Water Monitoring Program	
1. Has a ground water monitoring plan been submitted to the Director for facilities containing a surface impoundment, landfill, land treatment facility?	Y
2. Was the ground water monitoring plan reviewed prior to the site visit? If "No," explain.	Y
A. Was the ground water plan reviewed at the facility prior to the actual site inspection? If "No," explain.	Y
3. Has a ground water monitoring program (capable of determining the facility's impact on the quality of ground water in the uppermost aquifer underlying the facility) been implemented? 3745-65-90(A)	Y
4. Has at least one monitoring well been installed in the uppermost aquifer hydraulically upgradient from the limit of the waste management area? 3745-65-91(A)(1)	Y
A. Are sufficient ground water samples from the uppermost aquifer, representative of background ground water quality and not affected by the facility, ensured by proper well	
1) Number(s)?	Y
2) Location?	Y
3) Depth?	Y

APPENDIX A-1		Y/N
5. Have at least three monitoring wells been installed hydraulically downgradient at the limit of the waste handling or management area? 3745-65-91(A)(2)		Y
6. Have the locations of the waste handling, storage, or disposal areas been verified to conform with information in the ground water monitoring plan?		Y
7. Do the numbers, locations, and depths of the ground water monitoring wells agree with the data in the ground water monitoring system program? If "No," explain discrepancies.		Y
8. Have all monitoring wells been cased in a manner that:		Y
A. Maintains the integrity of the bore hole?		Y
B. Is screened and packed to enable sample collection at depths where appropriate aquifer flow exists?		Y
C. Prevents contamination of samples and ground water by sealing the annular space above the sampling depth with a suitable material? 3745-65-91(C)		Y
9. Has a ground water sampling and analysis plan been developed? 3745-65-92(A)		Y
A. Has it been followed?		Y
B. Is the plan kept at the facility?		Y
C. Does the plan include procedures and techniques for:		Y
1) Measuring ground water elevations? 3745-65-92(A)(1)		Y
2) Detection of immiscible layers, where applicable? 3745-65-92(A)(2)		N/A
3) Collecting ground water samples including? 3745-65-92(A)(3)		Y
a) Well evacuation? 3745-65-92(A)(3)(a)		Y
b) Sample withdrawal? 3745-65-92(A)(3)(b)		Y
c) Sample equipment? 3745-65-92(A)(3)(c)		Y
d) Sample containers and handling? 3745-65-92(A)(3)(d)		C-1
e) Sample preservation? 3745-65-92(A)(3)(e)		C-2
4) Performing field analysis, including:		C-3
a) Procedures and forms for recording raw data and the exact location, time, and facility specific considerations associated with the data acquisitions? 3745-65-92(A)(4)(a)		C-3
b) Calibration of field instruments? 3745-65-92(A)(4)(b)		Y
c) Procedures for sample filtration? 3745-65-92(A)(4)(c)		N/A
5) Decontamination of equipment? 3745-65-92(A)(5)		N/A
6) Disposal of purge water? 3745-65-92(A)(6)		Y

Y = YES, N = NO, NA = NOT APPLICABLE
NS = NOT SPECIFIED, * = COMMENT

APPENDIX A-1		Y/N
7) Ground water sample analysis of all applicable constituents associated with the facility including: 3745-65-92(A)(7)		
a) Constituents? 3745-65-92(A)(7)(a)		Y
b) Analytical method and detection limit? 3745-65-92(A)(7)(b)		C-4
c) Sample holding time? 3745-65-92(A)(7)(c)		↓
8) Quality assurance/quality control:		
a) Samples for field/lab/equipment blanks? 3745-65-92(A)(8)(a)		Y
b) Duplicate samples? 3745-65-92(A)(8)(b)		Y
c) Potential interferences? 3745-65-92(A)(8)(c)		C-5
9) Chain of custody procedures:		
a) Standardized field tracking reporting forms to establish sample custody for the field prior to and during shipping? 3745-65-92(A)(9)(a)		Y
b) Sample labels containing all information necessary for effective sample tracking? 3745-65-92(A)(9)(b)		C-6
10. Have the required parameters in ground water samples been tested quarterly for the first year? 3745-65-92(B) and (C)(1)		C-7
A. Are the ground water samples analyzed for the following:		
1) Parameters characterizing the suitability of the ground water as a drinking supply? 3745-65-92 B(1)		
2) Parameters establishing ground water quality? 3745-65-92 B(2)		
3) Parameters used as indicators of ground water contamination? 3745-65-92 B(3)		
a) Are at least four replicate measurements obtained for each sample? 3745-65-92(C)(2)		
b) Are provisions made to calculate the initial background arithmetic mean and variance of the respective parameter concentrations or values obtained from well(s) during the first year? 3745-65-92(C)(2)		↓
B. For facilities which have complied with first year ground water sampling and analysis requirements:		
1) Have samples been obtained and analyzed for the indicators of ground water quality at least annually? 3745-65-92(D)(1)		N/A
2) Have samples been obtained and analyzed for the indicators of ground water contamination at least semi-annually? 3745-65-92(D)(2)		N/A
C. Were ground water surface elevations determined at each monitoring well each time a sample was taken? 3745-65-92(E)		Y

APPENDIX A-1		Y/N
D. Were the ground water surface elevations evaluated to determine whether the monitoring wells are properly placed? 3745-65-93(F)		Y
E. If it was determined that modification of the number, location or depth of monitoring wells was necessary, was the system brought into compliance with 3745-65-91(A)? 3745-65-93(F)		N/A
11. Has an outline of a ground water quality assessment program been prepared? 3745-65-93(A)		C-8
A. Does it describe a program capable of determining:		
1) Whether hazardous waste or hazardous waste constituents have entered the ground water? 3745-65-93(A)(1)		
2) The rate and extent of migration of hazardous waste or hazardous waste constituents? 3745-65-93(A)(2)		
3) Concentrations of hazardous waste or hazardous waste constituents in ground water? 3745-65-93(A)(3)		
B. Have at least four replicate measurements of each indicator parameter been obtained for samples taken for each well? 3745-65-93(B)		
1) Were the results compared with the initial background mean?		
a) Was each well considered individually?		
b) Was the Student's t-test used (at the 0.01 level of significance)?		
2) Was a significant increase (or pH decrease) found in the:		
a) Upgradient wells?		Y
b) Downgradient wells?		C-9
If "Yes," Compliance Checklist A-2 must also be completed.		
12. Have records been kept of analyses for parameters establishing ground water quality and indicators of ground water contamination? 3745-65-94(A)(1)		N/A
13. Have records been kept of ground water surface elevations taken at the time of sampling for each well? 3745-65-94(A)(1)		N/A
14. Have the following been submitted to the Director: 3745-65-94(A)(2)		
A. Initial background concentrations of parameters listed in 3745-65-92(B)(1) within 15 days after completing each quarterly analysis required during the first year? 3745-65-94(A)(2)(a)		N/A
B. For each well, any parameters whose concentrations or values have exceeded the maximum contaminant levels allowed in drinking water supplies? 3745-65-94(A)(2)(a)		N/A
C. Annual reports including: 3745-65-94(A)(2)(b)		
1) Concentrations or values of parameters used as indicators of ground water contamination for each well?		C-10

Y = YES, N = NO, NA = NOT APPLICABLE
NS = NOT SPECIFIED, * = COMMENT

APPENDIX A-1		Y/N
2) Separate identification of any significant differences from initial background found in upgradient wells? 3745-65-94(A)(2)(b)		N/A
3) Results of the evaluation of ground water surface elevations?		Y
4) Was the Annual Report submitted by March 1 of the following year? 3745-65-75(F)		N

Comments to Appendix A - 1

Ground Water Monitoring Program

C - 1

9.C.3.d. The SAP does not list the containers that will be used for sampling at NECC.

C - 2

9.C.3.e. The SAP does state that preservation of the samples will be performed. However, the type of preservative and the final pH are not listed.

C - 3

9.C.4.a. Procedures and forms for logging field data are provided in the SAP. The field log, however, is not maintained on site.

C - 4

9.C.7.b. The analytical method of analysis has been documented in the SAP. However, the detection limits for the compounds analyzed and their holding times are not listed.

C - 5

9.D.8.c. A discussion of potential interferences during sample analysis is not included in the SAP.

C - 6

9.D.9.b. An example of sample labels required for effective sample tracking were not provided in the SAP.

C - 7

10. Only six volatile organic compounds are analyzed every quarter as per the Amended Closure Plan and the ground water quality assessment program.

C - 8

11. NECC entered into ground water quality assessment activities during an attempt to clean close the former drum holding area. A GWQAP outline was not prepared as part of a detection monitoring program since NECC was not required to have a detection monitoring program for the former drum holding area. A GWQAP was submitted with the Amended Closure Plan of November 1991. A full discussion of these events is detailed in Chapter VII.

C - 9

11.B.2. It was discovered that volatile organic compounds had entered the ground water and NECC commenced assessment activities. An increase in an indicator parameter (or a pH decrease) did not initiate the assessment activities.

Comments to Appendix A - 1 (cont.)

C - 10

14.C. Annual reports have listed only the required site specific volatile organic compounds analyses.

APPENDIX A-2

**INSPECTION COMPLIANCE FORM FOR A FACILITY THAT HAS
DETERMINED IT MAY BE AFFECTING
GROUND WATER QUALITY**

APPENDIX A-2
INSPECTION COMPLIANCE FORM FOR A FACILITY THAT HAS DETERMINED IT MAY BE
AFFECTING GROUND WATER QUALITY

Company Name: National Electrical Carbon Corp. EPA I.D. Number: 04D 004167219

Company Address: 200 North Town St., Fostoria, Ohio (Seneca County)

Company Contact/Official: R. Michael Wentzel Title: Manager - Health, Safety
Environment

Date of Inspection: December 12, 1994

Inspector's Name: George Stuckey Branch/Organization OEPA/DDAGW/NWDO

Type of facility: (check appropriately)

a) surface impoundment

Y/N

N

b) landfill

Y

c) land treatment facility

N

Ground Water Monitoring Program

1. Has (Have) comparison(s) of ground water contamination indicator parameters for the upgradient well(s) 3745-65-93(B) shown a significant increase (or pH decrease) over initial background?

C-1

A. If "Yes," has(have) the increase(s) been submitted to the Director as part of the annual report? 3745-65-94(A)(2)

2. Have comparisons of indicator parameters for the downgradient wells 3745-65-93(B) shown a significant increase (or decrease) over initial background?

A. If "Yes," were additional ground water samples taken for those downgradient wells where the significant difference was determined? 3745-65-93 (C)(2)

1) Were samples split in two?

2) Was the significant difference due to laboratory error?
 (If "Yes," do not continue.)

3. If significant differences were not due to laboratory error, was a written notice sent to the Director within 7 days of (laboratory) confirmation? 3745-65-93(D)(1)

4. Within 15 days of notification of the Director was a ground water quality assessment plan (GWQAP) submitted? 3745-65-93(D)(2)

↓

A. Does the GWQAP specify the following:

1) Hydrogeologic conditions at the facility? 3745-65-93(D)(3)(a)

Y

2) The detection monitoring program implemented by the facility, including, but not limited to:

N/A

Y = YES, N = NO, NA = NOT APPLICABLE
 NS = NOT SPECIFIED, * = COMMENT

APPENDIX A-2		Y/N
a) The number, location, depth, and construction of detection monitoring wells with written documentation? 3745-65-93(D)(3)(b)(i)		N/A
b) A summary of detection monitoring analytical data with written documentation of the results? 3745-65-93(D)(3)(b)(ii)		
c) A summary of statistical analyses applied to the data? 3745-65-93(D)(3)(b)(iii)		
3) The investigative approach to be followed during the assessment, including, but not limited to:		
a) The proposed number, location, depth, installation method, and construction of monitoring wells? 3745-65-93(D)(3)(c)(i)		Y
b) The proposed methods for gathering additional hydrogeologic information? 3745-65-93(D)(3)(c)(ii)		Y
c) The proposed use of supporting methodology (e.g., soil gas analysis, geophysics)? 3745-65-93(D)(3)(c)(iii)		N/A
d) The proposed methodology for determining contaminant migration rates? 3745-65-93(D)(3)(c)(iv)		C-2
4) Sampling and analysis procedures as specified under paragraph (A) of Rule 3745-65-92 of the Ohio Administrative Code? 3745-65-93(D)(3)(d)		Y
5) Proposed data evaluation procedures, including, but not limited to:		
a) Utilization of statistical data evaluation? 3745-65-93(D)(3)(e)(i)		C-3
b) Utilization of computer models? 3745-65-93(D)(3)(e)(ii)		N
c) Criteria that will be utilized to determine if additional assessment activities are warranted? 3745-65-93(D)(3)(e)(iii)		Y
6) A schedule of implementation? 3745-65-93(D)(3)(f)		Y
B. Does the plan allow for determination of:		
1) Rate and extent of migration of hazardous waste constituents? 3745-65-93(D)(4)(a)		C-4
2) Concentrations of the hazardous waste or hazardous waste constituents? 3745-65-93(D)(4)(b)		Y
C. Is it indicated that the 1st determination was made as soon as technically feasible? 3745-65-93(D)(5)		Y
1) Within 15 days after determination, was a written report containing the assessment of ground water quality submitted to the Director?		Y
D. Has it been determined that hazardous waste or hazardous waste constituents from the facility have entered the ground water?		Y

Y - YES, N - NO, NA - NOT APPLICABLE
NS - NOT SPECIFIED, * - COMMENT

APPENDIX A-2		Y/N
1) If "No," was the original detection evaluation program, required by OAC Rule 3745-65-92 reinstated?		N/A
a) Was the Director notified of the reinstatement of the program within 15 days of the determination? 3745-65-93(D)(6)		N/A
E. If it was determined that hazardous waste or hazardous waste constituents have entered the ground water:		
1) For facilities where the program was implemented prior to final closure, have determinations of hazardous waste or hazardous waste constituents continued on a quarterly basis? 3745-65-93(D)(7)(a)		C-5
2) Were(are) records kept of the analyses and evaluations specified in the ground water quality assessment plan throughout the active life of the facility? 3745-65-94(B)(1)		C-6
a) If a disposal facility, were (are) records kept throughout the post-closure period as well?		N/A
F. Are annual reports submitted to the Director containing the results of the ground water quality assessment program? 3745-65-94(B)(2)		C-7
1) Do the reports include the calculated or measured rate of migration of hazardous waste or hazardous waste constituents?		C-8
2) Have the annual reports been submitted by March 1 of the following year?(3745-65-75(F))		C-9

Y - YES, N - NO, NA - NOT APPLICABLE
 NS - NOT SPECIFIED, * - COMMENT

Comments to Appendix A - 2

Ground Water Monitoring Program

C - 1

1. NECC entered into ground water quality assessment activities during an attempt to clean close the former drum holding area. A GWQAP outline was not prepared as part of a detection monitoring program since NECC was not required to have a detection monitoring program for the former drum holding area. A GWQAP was submitted with the Amended Closure Plan of November 1991. A full discussion of these events is detailed in Chapter VII.

C - 2

- 4.A.3. The GWQAP does not provide the methodology for determining d. the rate of migration of the contaminants.

C - 3

- 4.A.5. The statistical method proposed in the Amended Post Closure a. Plan and GWQAP is a direct comparison method.

C - 4

- 4.B.1. The HydroPunch^R method will allow determination of the extent of the contamination, but the method or calculation of the rate of migration is not proposed in the GWQAP.

C - 5

- 4.E.1. Quarterly sampling and analysis have proceeded since implementation. However, analysis for trans 1,2-DCE was not performed for the December 12, 1994 sampling event.

C - 6

- 4.E.2. Field logbook records and chain of custody forms for the quarterly sampling events were not maintained at NECC.

C - 7

- 4.F.& The annual report for the facility was submitted to the Director. However, this report was incomplete since ground water potentiometric surface maps showing ground water flow directions for all quarterly sampling was not submitted.

C - 8

- 4.F.1 The calculated or measured rate of migration as well as a map or narrative describing the extent of the contamination were not included in the annual report.

C - 9

- 4.F.2 The 1993 Annual Report was submitted on March 4, 1994, three days late.



State of Ohio Environmental Protection Agency

OHIO E.P.A.

FEB -2 2007

STREET ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

ENTERED DIRECTOR'S JOURNAL

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

FEB 02 2007

Certified Mail

Mr. Dave Curlis
National Electrical Carbon Products, Inc.
200 North Town Street
Fostoria, Ohio 44830

I certify this to be a true and accurate copy of the
official documents as filed in the records of the Ohio
Environmental Protection Agency.

By: [Signature] Date: 2-2-07

Subject: Petition to End Post-Closure Care Period at the National Electrical Carbon Products, Inc. facility; OHD 004 167 219

Dear Mr. Curlis:

On August 14, 2006, a petition to end post-closure/financial assurance requirements was submitted on behalf of Morganite Industries, Inc. for the National Electrical Carbon Products facility in Fostoria, Ohio. The petitioner requests the termination of ground water monitoring requirements for the constituents 1,1-dichloroethane, 1,2-dichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene (cis-1,2- and trans-1,2-dichloroethene), trichloroethylene (trichloroethene) and vinyl chloride for the former drum holding area (FDHA) at the National Electrical Carbon Products facility. In accordance with the requirements of Ohio Administrative Code (OAC) Rule 3745-66-18 (G)(1)(b), Ohio EPA published a notice on November 20, 2006 in the Weekly Review announcing the receipt of the petition and establishing a thirty (30) day comment period. A public notice was also published in the Advertiser Tribune newspaper on November 22, 2006. Ohio EPA did not receive comments.

Ohio EPA has reviewed the petition. Based on the historic and recent sampling results, Ohio EPA agrees with Morganite Industries, Inc. that monitoring for the constituents 1,1-dichloroethane, 1,2-dichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene (cis-1,2- and trans-1,2-dichloroethene), trichloroethylene (trichloroethene) and vinyl chloride and maintaining the cap at the FDHA is no longer necessary. Therefore, Ohio EPA concludes that the criteria of OAC Rule 3745-66-18(G)(1)(a)(i) has been met and accordingly the ground water no longer needs to be monitored for these constituents under the post-closure care period for the waste management unit at the National Electrical Carbon Products facility described in your petition and January 2005 Closure

Certification. This approval is limited to the cessation of cap maintenance and ground water monitoring for the FDHA only and only for the constituents 1,1-dichloroethane, 1,2-dichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene (cis-1,2- and trans-1,2-dichloroethene), trichloroethylene (trichloroethene) and vinyl chloride. This approval does not prevent the State from seeking further relief under any law for ground water contamination for other contaminants than those listed above, for other units other than those listed above, or for contamination that may be newly discovered.

Our records show that National Electrical Carbon Products used a Letter of Credit to demonstrate compliance with the state's hazardous waste financial assurance requirements for post-closure care. Since the petition is approved, National Electrical Carbon is no longer subject to the financial assurance requirements for post-closure care. Therefore, Ohio EPA will no longer require the National Electrical Carbon Products facility to maintain financial assurance for post-closure care. Please contact Tina Jennings at (614)644-2051 to discuss the termination and return of the Letter of Credit.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address: Environmental Review Appeals Commission, 309 South Fourth Street, Room 222, Columbus, Ohio 43215.

Ohio EPA, Division of Hazardous Waste Management strongly encourages you to consider pollution prevention options for any processes at your facility that generate waste. While implementation of pollution prevention options is not required by Ohio laws and regulations, the application of waste minimization practices may help reduce the expense of remedial activities. Additionally, implementation of pollution prevention options may prevent the creation of new units and as a result eliminate the requirement

Mr. Dave Curlis
Page 3

to submit a closure plan in the future. For assistance in identifying and implementing pollution prevention options, contact Colleen Weaver at (419)373-3059.

Sincerely,

A handwritten signature in cursive script, appearing to read "Laura Powell".

Laura Powell
Acting Director

/cs

pc: Pamela Allen, Manager, RIS, DHWM, CO
Ed Lim, Manager, ERAS, DHWM, CO
Tina Jennings, DHWM, CO
Lynn Ackerson, DHWM, NWDO
Michael Terpinski, DHWM, NWDO
George Stuckey, DDAGW, NWDO
Harriet Croke, U.S. EPA, Region V
DHWM, NWDO File



State of Ohio Environmental Protection Agency

Northwest District Office

7 North Dunbridge Road
Milling Green, OH 43402-9398

TELE: (419) 352-8461 FAX: (419) 352-8468
www.epa.state.oh.us

Bob Taft, Governor
Bruce Johnson, Lieutenant Governor
Joseph P. Koncelik, Director

May 30, 2006

Mr. G. Frizzell
National Electrical Carbon Products, Inc.
200 North Town Street
Fostoria, Ohio 44830

**Re: Final Closure Letter
Decontamination
National Electrical Carbon Products, Inc.
OHD 004 167 219**

Dear Mr. Frizzell:

On April 14, 2003, Ohio EPA approved the amended closure plan for National Electrical Carbon Products, Inc.'s hazardous waste facility located at 200 North Town Street, Fostoria, Ohio 44830.

On January 11, 2005, the director received final closure certification documents from G. Frizzell, Vice-President Operations for National Electrical Carbon Products, Inc. Mr. Frizzell and Michael D. Robison, P.E. of Bennett & Williams certified that the Former Drum Holding Area (FDHA) has been closed according to the specifications in the approved amended closure plan. The type of closure was a closure by demonstration of successful decontamination to below health-based standards.

To verify National Electrical Carbon Products, Inc.'s closure activities, Lynn Ackerson from Ohio EPA's Northwest District Office reviewed documents pertaining to the closure of the facility and determined that the activities proposed in the closure plan were conducted adequately.

Based on this review, Ohio EPA has determined that National Electrical Carbon Products, Inc. has closed the facility according to the approved closure plan and Ohio Administrative Code (OAC) Rules 3745-66-11 through 3745-66-15.

The facility's compliance with closure obligations under Ohio's hazardous waste laws does not discharge National Electrical Carbon Products, Inc.'s obligation to investigate and possibly clean up contamination from releases of hazardous waste or hazardous constituents at the facility, regardless of when the waste was placed in the unit. This requirement is known as RCRA Corrective Action.

Our records show that National Electrical Carbon Products, Inc. uses a Letter of Credit mechanism to demonstrate compliance with the state's hazardous waste financial assurance requirements for post-closure care. Because National Electrical Carbon Products, Inc. has demonstrated decontamination of the FDHA at the facility, National Electrical Carbon Products, Inc. is no longer subject to the financial assurance requirements for post-closure care. You may contact Tina Jennings in the Division of Hazardous Waste Management, Compliance Assurance Section, concerning the release of the financial assurance mechanism.

Mr. G. Frizzell
May 30, 2006
Page Two

National Electrical Carbon Products, Inc. has completed final closure at the facility. National Electrical Carbon Products, Inc. will maintain the status of small quantity generator of hazardous waste.

According to National Electrical Carbon Products, Inc.'s closure certification, the FDHA monitoring wells and the recovery well must be abandoned in accordance with the Ohio EPA *Technical Guidance for Sealing Unused Wells* (1996). National Electrical Carbon Products, Inc. must notify Ohio EPA at least five days in advance of abandoning the monitoring and recovery wells.

If you have any questions concerning the closure process or the status of the facility, please contact Lynn Ackerson by phone at 419-373-4113, or by mailing address at Lynn Ackerson, Ohio EPA, Northwest District Office, Division of Hazardous Waste Management, 347 North Dunbridge Road, Bowling Green, Ohio 43402.

Sincerely,



Michael Terpinski
Supervisor
Division of Hazardous Waste Management

LA/cs

pc: Pamela Allen, Manager, RISS, DHWM, CO
Ed Lim, Manager, ERAS, DHWM, CO
Harry Sarvis, Manager, CAS, DHWM, CO
Cindy Lohrbach, DHWM, NWDO
Harriet Croke, U.S. EPA, Region V
DHWM, NWDO File

ec: Lynn Ackerson, DHWM, NWDO
Jennifer Avellana, ERAS, DHWM, CO
Tina Jennings, CAS, DHWM, CO
Jeremy Carroll, Supervisor, ERAS, DHWM, CO
Jeff Patzke, Manager, DDAGW, CO
George Stuckey, DDAGW, NWDO



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center
22 South Front St.
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

Lazarus Government Center
P. O. Box 1049
Columbus, OH 43216-1049

APR 14 2003

I certify this to be a true and accurate copy of the
official document as filed in the records of the Ohio
Environmental Protection Agency.

Certified Mail

Mr. Dave Curlis
National Specialty Products
200 North Town Street
Fostoria, Ohio 44830

Re: Amended Post-Closure Plan
Approval
National Specialty Products
OHD 004 167 219

RECEIVED

APR 21 2003

Technical Support and Permit Section
Waste Management Branch
Waste, Pesticides and Toxics Division
U.S. EPA - Region 5

ENTERED DIRECTOR'S JOURNAL

APR 14 2003

OHIO E.P.A.

Dear Mr. Curlis:

On July 19, 2001, Bennett & Williams Environmental Consultants, Inc., on behalf of National Specialty Products, submitted to Ohio EPA an amended closure/post-closure plan for the Former Drum Holding Area located at 200 North Town Street, Fostoria, Ohio. A revision to the amended closure/post-closure plan was received on November 5, 2002. The amended closure/post-closure plan was submitted pursuant to rules 3745-66-12 and 3745-66-18 of the Ohio Administrative Code (OAC) in order to demonstrate that National Specialty Products' proposal for amended closure/post-closure complies with the requirements of OAC rules 3745-66-11, 3745-66-12 and 3745-66-18.

The owner or operator and the public were given the opportunity to submit written comments regarding the amended post-closure plan in accordance with the hazardous waste rule requirements. No public comments were received by Ohio EPA.

Based upon review of National Specialty Products' submission and subsequent revision, I conclude that the amended closure/post-closure plan for the hazardous waste facility at 200 North Town Street, Fostoria Ohio, meets the performance standard contained in OAC rule 3745-66-11 and complies with the pertinent parts of OAC rule 3745-66-18.

The amended closure/post-closure plan submitted to Ohio EPA on July 19, 2001, and revised on November 5, 2002, by Bennett & Williams Environmental Consultants, Inc., on behalf of National Specialty Products is hereby approved.

Bob Taft, Governor
Maureen O'Connor, Lieutenant Governor
Christopher Jones, Director

Compliance with the approved closure/post-closure plan is expected. Ohio EPA will monitor such compliance. Ohio EPA expressly reserves the right to take action, pursuant to chapters 3734. and 6111. of the Ohio Revised Code, and other applicable law, to enforce such compliance and to seek appropriate remedies in the event of noncompliance with the provisions of this approved post-closure plan. Please be advised that approval of this amended closure/post-closure plan does not release National Specialty Products from any responsibilities regarding corrective action for all releases of hazardous waste or constituents from any waste management unit, regardless of the time at which waste was placed in the unit.

You are hereby notified that this action of the Director of Environmental Protection is final and may be appealed to the Environmental Review Appeals Commission pursuant to Ohio Revised Code section 3745.04. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the commission within 30 days after notice of the director's action. Notice of the filing of the appeal shall be filed with the director within three days after the appeal is filed with the commission. An appeal may be filed with the commission at the following address:

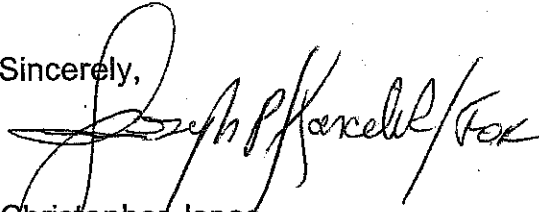
Environmental Review Appeals Commission
236 East Town Street; Room 300
Columbus, Ohio 43215

When closure is completed, OAC rule 3745-66-15 requires the owner or operator of a facility to submit to the director of Ohio EPA certification by the owner or operator and an independent, registered professional engineer, that the facility has been closed in accordance with the approved closure plan. The certification by the owner or operator shall include the statement found in OAC rule 3745-50-42(D). These certifications should be submitted to: Ms. Pamela Allen, Ohio Environmental Protection Agency, Division of Hazardous Waste Management, Information Technologies and Technical Support Section, P. O. Box 1049, Columbus, Ohio 43216-1049.

Ohio EPA, Division of Hazardous Waste Management, strongly encourages you to consider pollution prevention options for any processes at your facility that generate waste. While implementation of pollution prevention options is not required by Ohio laws and regulations, the application of waste minimization practices may help reduce the expense of remedial activities. Additionally, implementation of pollution prevention options may prevent the creation of new units and, as a result, eliminate the requirement to submit a closure plan in the future. For assistance in identifying and implementing pollution prevention options, contact Colleen Weaver at (419)373-3059.

Mr. Dave Curlis
Page Three

Sincerely,



Christopher Jones
Director

LMA/cs

pc: Pamela Allen, DHWM, IT&TSS, CO
Ed Lim, Manager, DHWM, CO
Harriet Croke, U.S. EPA, Region V
Lynn Ackerson, DHWM, NWDO
Michael Terpinski, Supervisor, DHWM, NWDO



State of Ohio Environmental Protection Agency

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MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

Certified Mail

February 26, 2001

Re: Director's Request to Modify the
Hazardous Waste Facility Post-Closure
Plan for National Electric Carbon
Corporation

National Electric Carbon Corporation
Attn: Jacob Warrington
200 North Town Street
Fostoria, Ohio 44830

Dear Mr. Warrington:

A long-term goal of U.S. EPA's Strategic Plan¹ for 2000 is to assure that wastes will be stored, treated, and disposed of in ways that prevent harm to people and the natural environment. One of the many objectives established as a means to achieving this goal is that "by 2005, at least 80 percent of the hazardous waste management facilities...will have controls in place to prevent dangerous releases to air, soil, and ground water." Achievement of this objective depends heavily upon participation of states, like Ohio, that have been authorized or approved by U.S. EPA to be the primary implementors of environmental regulatory programs in lieu of U.S. EPA. By meeting this objective, Ohio EPA and U.S. EPA will make significant progress toward achieving the long-term goal.

Over the last several months, Ohio EPA's Division of Hazardous Waste Management (DHWM) worked with U.S. EPA staff in Region V to establish the Hazardous Waste Post-Closure Baseline. The Post-Closure Baseline includes any hazardous waste land disposal unit (landfill, waste pile, or surface impoundment) not covered by a permit that was either in the process of undergoing closure without completing closure or completed closure with waste in place on or before October 1997.

A facility on the Post-Closure Baseline is considered to have an approved control in place for the land disposal unit where:

¹ A copy of the plan is available at US EPA's website see
<http://www.epa.gov/ocfopage/plan/2000strategicplan.pdf>

Bob Taft, Governor
Maureen O'Connor, Lieutenant Governor
Christopher Jones, Director



- (1) A post-closure permit was issued for the unit, or an existing permit was modified to include the post-closure unit;
- (2) The unit has achieved clean-closure;
- (3) The unit is closed with waste in place, as verified by Ohio EPA, and a post-closure plan or similar enforceable document covers appropriate post-closure obligations, including Ohio Administrative Code (OAC) Chapters 3745-54 and 3745-55 final ground water monitoring and cap maintenance requirements;
- (4) The unit is located among (solid) waste management units and the closure and post-closure obligations are covered by a corrective action administrative or judicial order; or
- (5) The unit has been accepted by Ohio EPA's Division of Emergency and Remedial Response or the federal Superfund program for remediation.

Our records indicate your facility has been identified as a Post-Closure Baseline facility because the following land disposal unit is subject to an approved post-closure plan and does not appear to have an approved control in place:

Unit Identification

Post Closure Approval Date

Container Storage Area

2/23/1996

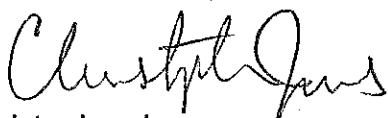
Of the options available to Ohio EPA to ensure approved controls in place for Post-Closure Baseline facilities, this Agency has chosen as its preference Option No. (3) above. Accordingly, I am requesting, pursuant to OAC rule 3745-66-18, that National Electric Carbon Corporation modify its post-closure plan to implement the OAC Chapters 3745-54 and 3745-55 final ground water monitoring and response requirements as well as the cap maintenance requirements.² Ohio EPA believes that this approach is the most efficient way to ensure adequate controls in place and avoids some of the practical problems associated with implementing post-closure permitting pursuant to OAC rule 3745-50-45(A). Ohio EPA, however, reserves its rights to require implementation of controls in place at Post-Closure Baseline facilities through other mechanisms, such as post-closure permits, if necessary.

² OAC rule 3745-54-01(B) sets out that OAC Chapters 3745-54 through 3745-57 apply to "owners and operators of all facilities which treat, store, or dispose of hazardous waste, except as specifically provided otherwise in such chapters or Chapter 3745-51 of the Administrative Code."

As specified by OAC rule 3745-66-18, National Electric Carbon Corporation is required to submit its modified post-closure plan to Ohio EPA no later than 60 days after receipt of this request. I look forward to receiving the modified plan.

If you should have any questions, please contact Ed Lim in our Central Office at (614) 644-2824 or Andrew Winch in the Northwest District Office at (419) 373-3135.

Sincerely,



Christopher Jones
Director

g:\users\elim\40cfr265gwmonitoring

cc: Michael Savage, Chief, DHWM
Edwin Lim, ERAS, DHWM
Andrew Winch, DHWM, NWDO



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

AMENDED CLOSURE/POST-CLOSURE PLAN APPROVAL

CERTIFIED MAIL

**Re: Amended Closure/Post-Closure Plan
National Electric Carbon Corporation
OHD 004 167 219**

February 23, 1996

Mr. R. Michael Wentzel
National Electric Carbon Corporation
200 North Town Street
Fostoria, Ohio 44830

Dear Mr. Wentzel:

On November 12, 1991 National Electric Carbon Corporation submitted to Ohio EPA an amended closure/post-closure plan for the former drum holding area located at 200 North Town Street, Fostoria, Ohio. Revisions to the amended closure/post-closure plan were received on December 11, 1995. The amended post-closure plan was submitted pursuant to Rules 3745-66-11 and 3745-66-18 of the Ohio Administrative Code (OAC) in order to demonstrate that National Electric Carbon Corporation's amended proposal for post-closure complies with the requirements of OAC Rules 3745-66-11, 3745-66-12, and 3745-66-18.

The public was given the opportunity to submit written comments regarding the amended post-closure plan of National Electric Carbon Corporation in accordance with OAC Rule 3745-66-11 and 3745-66-18. No comments were received by Ohio EPA in this matter.

Based upon review of National Electric Carbon Corporation's submittal and subsequent revisions, I conclude that the amended post-closure plan for the hazardous waste facility at 200 North Town Street, Fostoria, as modified herein, meets the performance standard contained in OAC Rule 3745-66-11 and complies with the pertinent parts of OAC Rule 3745-66-12 and 3745-66-18.

The amended post-closure plan submitted to Ohio EPA on November 12, 1991 and revised on December 11, 1995 by National Electric Carbon Corporation is hereby approved with the following conditions:

- 1) Discontinue quarterly ground water quality sampling from the monitoring wells and continue to operate the recovery well as part of National Electric Carbon Corporation's overall voluntary ground water remediation system.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: [Signature] Date: 2/23/96

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director

OHIO E.P.A.
FEB 23 96
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- 2) Annually measure the potentiometric ground water surface to reaffirm that the recovery well is providing hydraulic capture of ground water from beneath the former drum holding area.
- 3) Provide an annual report to the Ohio EPA.
- 4) If and when the operation of the recovery well is discontinued, National Electric Carbon Corporation will resume sampling the monitoring wells on a quarterly basis for a minimum of eight (8) consecutive quarters. Assuming that constituent levels remain below established water quality criteria, the Director of the Ohio EPA will be petitioned again to reduce or eliminate post closure ground water monitoring requirements.
- 5) National Electric Carbon Corporation should continue quarterly ground water monitoring until final approval of this petition.
- 6) Upon approval of this petition, National Electric Carbon Corporation should append this petition to its Amended Closure Plan of November 1991 or revise said closure plan.

Please be advised that approval of this amended post-closure plan does not release National Electric Carbon Corporation from any responsibilities as required under the Hazardous and Solid Waste Amendments of 1984 regarding corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

Notwithstanding compliance with the terms of the post-closure plan, the Director may, on the basis of any information that there is or has been a release of hazardous waste, hazardous constituents, or hazardous substances into the environment, issue an order pursuant to Section 3734.20 et seq of the Revised Code or Chapters 3734 or 6111 of the Revised Code requiring corrective action or such other response as deemed necessary; or initiate appropriate action; or seek any appropriate legal or equitable remedies to abate pollution or contamination or to protect public health or safety or the environment.

Nothing here shall waive the right of the Director to take action beyond the terms of the post-closure plan pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. §9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499 ("CERCLA") or to take any other action pursuant to applicable Federal or State law, including but not limited to the right to issue a permit with terms and conditions requiring corrective action pursuant to Chapters 3734 and 6111 of the Revised Code; the right to seek injunctive relief, monetary penalties and punitive damages, to undertake any removal, remedial, and/or response action relating to the facility, and to seek recovery for any costs incurred by the Director in undertaking such actions.

Strict compliance with each and every provision of this approved closure plan, especially including the modifications specified herein, is expected. The Ohio EPA will monitor such compliance. The Director expressly reserves the right to take action, pursuant to Chapters 3734

OHIO E.P.A.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: X Michael Wentzel Date 2/23/96

FEB 23 96

ENTERED DIRECTOR'S JOURNAL


R. Michael Wentzel
National Electric Carbon Corp.
Page 3

and 6111 of the Revised Code, and other applicable law, to enforce such compliance and to seek appropriate remedies in the event of noncompliance with the provisions and modifications of this approved closure plan.

You are notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address: Environmental Board of Review, 236 East Town Street, Room 300, Columbus, Ohio 43266-0557.

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and an independent, registered professional engineer that the facility has been closed in accordance with the approved closure plan. The certification by the owner or operator shall include the statement found in OAC 3745-50-42 (D). These certifications should be submitted to: Ohio Environmental Protection Agency, Division of Hazardous Waste Management, Attn: Tom Crepeau, Data Management Section, P.O. Box 1049, Columbus, Ohio 43216-1049.

Sincerely,



Donald R. Schregardus
Director

necc.closures/dh.ao

pc: Tom Crepeau, DHWM Central File, Ohio EPA
Montee Suleiman, Ohio EPA, DHWM
Harriet Croke, USEPA, Ohio Permit Section, Region V
Melissa Winzeler, NWDO, Ohio EPA

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Harriet Croke Date 2/23/96

OHIO E.P.A.

FEB 23 96

ENTERED DIRECTOR'S JOURNAL



State of Ohio Environmental Protection Agency

A.4.1

STREET ADDRESS:

800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

January 12, 1996

Re: Receipt of Amended Closure
Plan
U.S. EPA ID No.
OHD004167219

National Electrical Carbon Corporation
Attn: Mr. R. Michael Wentzel
200 N. Town Street
Fostoria, Ohio 44830



Dear Mr. Wentzel:

With this letter the Ohio EPA acknowledges receipt of the amended hazardous waste post-closure plan for the former hazardous waste drum holding area, located at 200 N. Town Street, Fostoria, Ohio 44830. The amended post-closure plan was received by the Ohio EPA central office on December 11, 1995. A public notice concerning receipt of the plan and its availability for public review will appear the week of January 15, 1996 in The Advertiser Tribune. The Director of the Ohio EPA will act upon the closure plan after the close of the public comment period on February 19, 1996.

A copy of the amended closure plan will be made available for public review at the Kaubisch Memorial Public Library, 205 Perry Street, Fostoria, Ohio 44830, and at the Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio 43402, tel: (419) 352-8461.

Please contact Melissa Winzeler of the Northwest District Office if you have any questions on this matter.

Sincerely,

Vanessa Gregory

Vanessa Gregory, Management Analyst
Data Management Section
Division of Hazardous Waste Management

cc: Harriet Croke, U.S. EPA, Region 5
Montee Suleiman, DHWM
Melissa Winzeler, NWDO

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director

PUBLIC NOTICE

SENECA COUNTY

NOTICE OF RECEIPT OF AMENDED HAZARDOUS WASTE POST-CLOSURE PLAN

Notice is hereby given of the receipt on December 11, 1995 of an amended hazardous waste post-closure plan for National Electrical Carbon Corp., 200 N. Town Street, Fostoria, Ohio 44830, U.S. EPA I.D. No. OHD004167219. The amended post-closure plan concerns the former hazardous waste drum holding area located at the address indicated above. A copy of the amended post-closure plan will be available for public review at the Kaubisch Memorial Public Library, 205 Perry Street, Fostoria, Ohio 44830, and at Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio 43402, tel : (419) 352-8461. Comments concerning this plan may be submitted within 30 days of the date of this notice to the Ohio EPA, Division of Hazardous Waste Management, Attn: Data Management Section, 1800 Watermark Dr., Columbus, Ohio 43215-1099, tel: (614) 644-2977.



State of Ohio Environmental Protection Agency

P.O. Box 163669, 1800 WaterMark Dr.
Columbus, Ohio 43216-3669
(614) 644-3020
FAX (614) 644-2329

RECEIVED
WMD RECORD CENTER

JAN 06 1995

George V. Voinovich
Governor

November 10, 1994

Re: Completion of Closure
NECC
U.S. EPA ID No.
OHD004167219

National Electric Carbon Corporation
Attn: Mr. R. Michael Wentzel
200 N. Town Street
Fostoria, Ohio 44830

RECEIVED
WMD RECORD CENTER

JAN 06 1995

Dear Mr. Wentzel:

According to Ohio EPA records, on April 30, 1992, the Director of the Ohio EPA approved a closure plan for National Electric Carbon Corporation (NECC), 200 Town Street, Fostoria, Ohio 44830. The plan concerned a hazardous waste drum storage area at that facility. On August 13, 1993, the Director received certification documents stating that the hazardous waste drum storage area had been closed according to the specifications in the approved closure plan. Ohio EPA District office personnel completed a final certification of closure inspection and a review of documents pertaining to the drum storage area on September 16, 1994.

Based on this inspection and review, the Ohio EPA has determined that the hazardous waste drum storage area has been closed in accordance with the approved closure plan and Rules 3745-66-12 through 3745-66-15 of the Ohio Administrative Code (OAC). National Electric Carbon Corporation will continue to operate as a large quantity generator.

As specified in OAC Rule 3745-66-40, NECC, will not be required to maintain financial assurance for closure costs and liability coverage for accidental occurrences at this location, in accordance with OAC Rules 3745-66-43(H) and 3745-66-47(E).

Please note that this letter does not relieve the facility of any corrective action responsibilities that may be required.



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EPA 1613 (rev. 5/94)



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

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FEB 26 1993
Part A

George V. Voinovich
Governor

February 18, 1993

RE: CLOSURE PLAN EXTENSION
National Electric Carbon Corp.
Hazardous Waste Storage Facility
OHD 004 167 219

CERTIFIED MAIL

Mr. R. Michael Wentzel
Manager, Health, Safety & Environmental Affairs
National Electrical Carbon Corporation
200 North Town Street
Fostoria, Ohio 44830

Dear Mr. Hare:

On January 25, 1993, National Electrical Carbon Corporation, located at 200 North Town Street, submitted a request for a 120-day extension to the closure period specified in the approved closure plan for the Former Drum Holding Area as entered into the Director's Journal on April 30, 1992. National Electrical Carbon Corporation previously submitted a 90-day closure period extension request on September 29, 1992, which was approved on December 9, 1992, for 90 days until January 25, 1993. The January 25, 1993 letter requested an additional 120-day extension until May 26, 1993. Each extension request was submitted pursuant to OAC Rule 3745-66-13 (B) as closure will require longer than the 180-day period specified in OAC Rule 3745-66-13. National Electrical Carbon Corporation has requested this extension because of additional work that needed to be accomplished to define the rate and extent of contamination from the former drum storage area. Furthermore, National Electrical Carbon Corporation is requesting an extension to allow for the Ohio EPA to complete the review of the revised ground water monitoring well locations and to postpone the construction of the clay cover until more appropriate weather conditions predominate.

My staff reviewed your request and recommends that the extension be granted per rule 3745-66-13 (B) of the Ohio Administrative Code. I concur and am therefore granting this extension request. This extension is being granted for the above referenced closure plan and expires on May 26, 1993.

National Electrical Carbon Corporation shall continue to take all steps to prevent a threat to human health and the environment from the unclosed, but inactive waste management unit per OAC Rule 3745-66-13 (B)(2).

Please be advised that approval of this closure extension request does not

I certify this to be a true and accurate copy of the
official document as filed in the records of the Ohio
Environmental Protection Agency.

By: Mary Gavin Date: FEB 18 1993



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OHIO E.P.A.
FEB 18 93
ENTERED DIRECTOR'S JOURNAL

Mr. R. Michael Wentzel
Page 2


release National Electrical Carbon Corporation from any responsibilities as required under the Hazardous and Solid Waste Amendments of 1984 regarding corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and an independent professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. These certifications shall follow the format specified in OAC 3745-50-42 (D), and should be submitted to: Ohio Environmental Protection Agency, Division of Hazardous Waste Management, Attn: Tom Crepeau, Data Management Section, P.O. Box 1049, Columbus, Ohio 43226-1049.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days from the receipt of this letter. A copy of the appeal must be served to the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal must be filed at the following address:

Environmental Board of Review
236 East Town Street
Room 300
Columbus, Ohio 43215

Sincerely,


Donald R. Schregardus
Director

PAW/mtt

pc: Tom Crepeau, DHWM Central File, Ohio EPA
Section Chief, Ohio Permit Section, U.S. EPA - Region V
Randy Meyer, DHWM, Ohio EPA
Philip A. Williams, DHWM, NWDO

I certify this to be a true and accurate copy of the
official document as filed in the records of the Ohio
Environmental Protection Agency.

By: Mary Cavin Date FEB 18 1993

OHIO E.P.A.

FEB 18 93

ENTERED DIRECTOR'S JOURNAL



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

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FEB 26 1993

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DEC 14 1992

George V. Voinovich
Governor

Donald R. Schregardus
Director

CERTIFIED MAIL

OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

December 9, 1992

RE: CLOSURE PLAN EXTENSION APPROVAL
National Electric Carbon Corporation
OHD 004 167 219

National Electric Carbon Corporation
Mr. R. Michael Wentzel
200 North Town Street
Fostoria, Ohio 44830

Dear Mr. Wentzel:

On September 29, 1992, National Electric Carbon Corporation, located at 200 N. Town Street, Fostoria, Ohio, submitted a request for an extension to the closure period specified in the approved closure plan dated April 30, 1992, for a drum storage area, for 90 days until January 25, 1993. The extension request was submitted pursuant to OAC Rule 3745-66-13(B) as closure will require longer than the 180 day period specified in OAC Rule 3745-66-13. National Electric Carbon Corporation has requested this extension due to mobilization and equipment delivery delays.

My staff reviewed your request and recommends that the extension be granted per rule 3745-66-13(B) of the Ohio Administrative Code. I concur and am therefore granting this extension request. This extension is being granted for the above referenced closure plan and expires on January 25, 1993.

National Electric Carbon Corporation shall continue to take all steps to prevent a threat to human health and the environment from the unclosed, but inactive waste management unit per OAC Rule 3745-66-13(B) (2).

Please be advised that approval of this closure extension request does not release National Electric Carbon Corporation from any responsibilities as required under the Hazardous and Solid Waste Amendments of 1984 regarding corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

OHIO E.P.A.

DEC -9 92

ENTERED DIRECTOR'S JOURNAL

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Gavin Date 12-9-92

Mr. R. Michael Wentzel
National Electric Carbon Corporation
Page Two

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and an independent professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. These certifications shall follow the format specified in OAC 3745-50-42(D), and should be submitted to: Ohio Environmental Protection Agency, Division of Hazardous Waste Management, Attn: Tom Crepeau, Data Management Section, P.O. Box 1049, Columbus, Ohio 43226-0149.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days from the receipt of this letter. A copy of the appeal must be served to the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal must be filed at the following address:

Environmental Board of Review
236 East Town Street
Room 300
Columbus, Ohio 43215

Sincerely,

Gerry Scannides
Donald R. Schregardus *for*
Director

DRS/PV/pas

cc: Tom Crepeau, DHWM Central File, Ohio EPA
Section Chief, Ohio Permit Section
USEPA - Region V
Randy Meyer, DHWM, Ohio EPA
Phil Williams, NWDO, Ohio EPA

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Cavin Date 12-9-92

OHIO E.P.A.

DEC -9 92

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State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

RECEIVED
MAY 11 1992

George V. Voinovich
Governor

OFFICE OF RCRA
Waste Management Division
EPA REGION V
Donald R. Schregardus
Director

CLOSURE/POST-CLOSURE PLAN APPROVAL

CERTIFIED MAIL

April 28, 1992

RE: CLOSURE/POST-CLOSURE PLAN
National Electric Carbon Corp.
OHD 004 167 219/03-74-0385

Mr. Michael Wentzel
National Electric Carbon Corp.
200 North Town Street
Fostoria, Ohio 44830

Dear Mr. Wentzel:

On November 19, 1990, National Electric Carbon Corp. submitted to Ohio EPA a closure/post-closure plan for a hazardous waste drum storage drum area located at 200 North Town Street, Fostoria, Ohio. Revisions to the closure/post-closure plan were received on November 14, 1991. The closure/post-closure plan was submitted pursuant to Rule 3745-66-12 and 3745-66-18 of the Ohio Administrative Code (OAC) in order to demonstrate that National Electric Carbon Corp.'s proposal for closure complies with the requirements of OAC Rules 3745-66-11, 3745-66-12 and 3745-66-18.

The public was given the opportunity to submit written comments regarding the closure/post-closure plan of National Electric Carbon Corp. in accordance with OAC Rule 3745-66-12 and 3745-66-18. No comments were received by Ohio EPA in this matter.

Based upon review of National Electric Carbon Corp.'s submittal and subsequent revisions, I conclude that the closure/post-closure plan for the hazardous waste drum holding area at National Electric Carbon Corp. meets the performance standard contained in OAC Rule 3745-66-11 and complies with the pertinent parts of OAC Rule 3745-66-12 and 3745-66-18

The closure/post-closure plan submitted to Ohio EPA by National Electric Carbon Corp. on November 19, 1990 and revised on November 14, 1991 is hereby approved.

I certify this to be a true and accurate copy of the
official document as filed in the records of the Ohio
Environmental Protection Agency.

By: Mary Gavin Date 4-30-92

OHIO E.P.A.

APR 30 92

ENTERED DIRECTOR'S JOURNAL

Mr. Wentzel
National Electric Carbon Corp.
Page Two

Please be advised that approval of this closure/post-closure plan does not release National Electric Carbon Corp. from any responsibilities as required under the Hazardous and Solid Waste Amendments of 1984 regarding corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

Nothing here shall waive the right of the Director to take action beyond the terms of the closure plan pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.A. §9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499 ("CERCLA") or to take any other action pursuant to applicable Federal or State law, including but not limited to the right to issue a permit with terms and conditions requiring corrective action pursuant to Chapters 3734 or 6111 of the Revised Code; the right to seek injunctive relief, monetary penalties and punitive damages, to undertake any removal, remedial, and/or response action relating to the facility, and to seek recovery for any costs incurred by the Director in undertaking such actions.

You are notified that this action of the director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.014 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address: Environmental Board of Review, 236 East Town Street, Room 300, Columbus, Ohio 43266-0557.

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and an independent, registered professional engineer that the facility has been closed in accordance with the approved

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Gavin Date 4-30-92

OHIO EPA

APR 30 1992

ENTERED DIRECTOR'S JOURNAL

04 APR 1989

5H-12

R. Michael Wentzel, Manager
Health, Safety and Environmental Affairs
National Electric Carbon Corporation
200 North Town Street
Fostoria, Ohio 44830

RE: Closure Plan Extension Request
National Electric Carbon
Corporation
OHD 004 156 219

Dear Mr. Wentzel:

This letter is in response to National Electric Carbon Corporation's (NECC) request of a 120-day extension to complete closure of the hazardous waste drum storage pad located at the 200 North Town Street facility in Fostoria, Ohio. The extension was requested due to the discovery of contaminated soil near the hazardous waste storage pad undergoing closure. The closure plan for this unit was approved by the United States Environmental Protection Agency (U.S. EPA) on August 11, 1988.

The Ohio Environmental Protection Agency (OEPA) approved the extension in a letter dated March 7, 1989. The U.S. EPA concurs with OEPA's decision and is approving an extension of 120 days provided that the conditions stipulated by OEPA are met. Closure of the storage pad shall, therefore, be completed no later than July 7, 1989.

If you have any further questions, please contact Bruce Sypniewski of my staff at (312) 886-6189.

Sincerely,

Basil G. Constantelos, Director
Waste Management Division

cc: Ed Kitchen, DSHWM, OEPA
Janet Leite, NWCD, OEPA
Randy Meyer, DSHWM, OEPA

5HR-13:SYNIEWSKI:pb:03/22/89:6-6189
Revised:03/31/89:bd

Disk no. 3

5H-12

R. Michael Wentzel, Manager
Health, Safety and Environmental Affairs
National Electric Carbon Corporation
200 North Town Street
Fostoria, Ohio 44830

RE: Closure Plan Extension Request
National Electric Carbon
Corporation
OHD 004 156 219

Dear Mr. Wentzel:

This letter is in response to National Electric Carbon Corporation's (NECC) request of a 120-day extension to complete closure of the hazardous waste drum storage pad located at the 200 North Town Street facility in Fostoria, Ohio. The extension was requested due to the discovery of contaminated soil near the hazardous waste storage pad undergoing closure. The closure plan for this unit was approved by the United States Environmental Protection Agency (U.S. EPA) on August 11, 1988.

The Ohio Environmental Protection Agency (OEPA) approved the extension in a letter dated March 7, 1989. The U.S. EPA concurs with OEPA's decision and is approving an extension of 120 days provided that the conditions stipulated by OEPA are met.

If you have any further questions, please contact Bruce Sypniewski of my staff, at (312) 886-6189.

Sincerely,

Basil G. Constantelos, Director
Waste Management Division

cc: Ed Kitchen, DSHWM, OEPA
Janet Leite, NWCD, OEPA
Randy Meyer, DSHWM, OEPA

bcc: Bruce Sypniewski, OR-RPB, Ohio Section

5HR-13:SYNIEWSKI:pb:03/22/89:6-6189

Disk no. 3

DEPT	TYP.	AUTH.	IL. CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	RPB CHIEF	O.R. CHIEF	YOUNG
PERMITS	3-27-89 PB	6/18 3-27-89					3-27-89	3-28-89	3-31-89	

Lead 3/27/89
3-29-89
3-31-89

after
closure

3/31/89

04 APR 1989

R. Michael Wentzel, Manager
Health, Safety and Environmental Affairs
National Electric Carbon Corporation
200 North Town Street
Fostoria, Ohio 44830

RE: Closure Plan Extension Request
National Electric Carbon
Corporation
OHD 004 156 219

Dear Mr. Wentzel:

This letter is in response to National Electric Carbon Corporation's (NECC) request of a 120-day extension to complete closure of the hazardous waste drum storage pad located at the 200 North Town Street facility in Fostoria, Ohio. The extension was requested due to the discovery of contaminated soil near the hazardous waste storage pad undergoing closure. The closure plan for this unit was approved by the United States Environmental Protection Agency (U.S. EPA) on August 11, 1988.

The Ohio Environmental Protection Agency (OEPA) approved the extension in a letter dated March 7, 1989. The U.S. EPA concurs with OEPA's decision and is approving an extension of 120 days provided that the conditions stipulated by OEPA are met. Closure of the storage pad shall therefore be completed no later than July 7, 1989.

If you have any further questions, please contact Bruce Sypniewski of my staff at (312) 886-6189.

Sincerely,

Basil G. Constantelos, Director
Waste Management Division

cc: Ed Kitchen, DSHWM, OEPA
Janet Leite, NWCDO, OEPA
Randy Meyer, DSHWM, OEPA

5HR-13:SYNIEWSKI:pb:03/22/89:6-6189
Revised:03/31/89:bd

Disk no. 3



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

File in
Part A / Notif.
File

CERTIFIED MAIL

NOTICE OF DEFICIENCY

September 4, 1991

Mr. Michael Wentzel
National Electric Carbon Corp.
200 North Town Street
Fostoria, Ohio 44830

RE: CLOSURE/POST-CLOSURE PLAN
National Electric Carbon Corp.
OHD 004 167 219

RECEIVED
SEP 5 1991
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION IV

Dear Mr. Wentzel:

On November 19, 1990, Ohio EPA received from National Electric Carbon Corp. a closure/post-closure plan for a hazardous waste storage area located at 200 N. Town Street, Fostoria, Ohio.

This closure/post-closure plan was submitted pursuant to Rules 3745-66-12 and OAC 3745-66-18 of the Ohio Administrative Code (OAC) in order to demonstrate that the National Electric Carbon Corp. proposal for closure complies with the requirements of OAC Rules 3745-66-11, 3745-66-12, and OAC 3745-66-18.

The public was given the opportunity to submit written comments regarding the closure/post-closure plan in accordance with OAC Rules 3745-66-12 and OAC 3745-66-18. The public comment period extended from December 3, 1990 through January 9, 1991. No public comments were received by Ohio EPA.

Pursuant to OAC Rules 3745-66-12(D)(4) and OAC 3745-66-18(F) I am providing you with a statement of deficiencies in the plan, outlined in Attachment A.

Please take notice that OAC Rule 3745-66-12 and OAC 3745-66-18 require that a modified closure/post-closure plan addressing the deficiencies enumerated in Attachment A be submitted to the Director of the Ohio EPA for approval within thirty (30) days of the receipt of this letter.

Mr. Wentzel
Page Two

The modified closure/post-closure plan shall be in accordance with the following editorial protocol or convention:

1. Old Language is over-struck, but not obliterated.
2. New Language is capitalized.
3. Page headers should indicate date of submission.
4. If significant changes are necessary, pages should be re-numbered, table of contents revised, and complete sections provided as required.

The modified closure/post-closure plan should be submitted to: Ohio Environmental Protection Agency, Division of Solid and Hazardous Waste Management, Attn: Thomas Crepeau, Manager, Data Management Section, P.O. Box 1049, Columbus, Ohio 43266-0149. A copy should also be sent to: Phil Williams, Ohio EPA, Northwest District Office, 347 N. Dunbridge Road, P.O. Box 466, Bowling Green, Ohio 43402-0466.

Upon review of the resubmitted plan, I will prepare and issue either a draft or a final action approving or modifying such plan. If you wish to arrange a meeting to discuss your responses to this Notice of Deficiency, please contact Paul Vandermeer, Ohio EPA, DSHWM, Central Office (614) 644-2956 or Phil Williams at (419) 352-8461.

Sincerely,



Donald R. Schregardus
Director

DRS/PV/pas

cc: Tom Crepeau, DSHWM, Central File, Ohio EPA
Lisa Pierard, USEPA, Region V
Joel Morbito, USEPA, Region V
Phil Williams, Ohio EPA, NWDO
Paul Vandermeer, CO, Ohio EPA
Chuck Hull, Ohio EPA, NWDO

ATTACHMENT A
National Electric Carbon Corporation

1. **Landfill Closure, Page 23.**

National Electric Carbon Corporation (NECC) proposes a "hybrid closure option" for completing closure of the contaminated storage area. This is unacceptable. NECC shall revise the closure/post-closure plan to indicate that the option will be landfill closure with 30 years post-closure care. Ohio EPA agrees that it may not be necessary, at this time, to construct a standard RCRA cap, however, the unit will be officially closed as landfill and post-closure care (e.g., ground water monitoring and remediation, site control, deed restrictions, etc.) shall be required. If for any reason ground water recovery operations are abandoned, or uncompleted, then a final RCRA cap will be required.

NECC will also be required to place a cover over the landfill during ground water recovery. This cover must comply with OAC 3745-68-10.

2. **General Comment.**

NECC shall revise the closure/post-closure plan to include a statement that NECC will contact the Ohio EPA, Northwest District Office (NWD0) inspector a minimum of 5 days in advance of the start of critical closure/post-closure activities.

3. **Equipment Decontamination, Page 29.**

NECC shall revise the closure/post-closure plan to describe what will be done with the equipment decontamination residues (solids and rinseate), including the purge water from each monitoring well.

4. **Closure Schedule.**

The closure schedule submitted in Figure 18 does not define the time units of the schedule (although this can be inferred as weeks, presumably). The closure schedule shall address all critical points that will be conducted during the first year of closure and a separate schedule should be provided which addresses all the critical points of the post-closure care period.

The post-closure care period shall be planned for 30-years including the costs associated with this care period. NECC may petition the Director to shorten the post-closure care period if it can be shown that human health and the environment are no longer at risk from the hazardous waste management unit (i.e., if "clean closure standards" are satisfied). However, the Director may also lengthen the time for post-closure care if necessary.

5. General Comment.

NECC shall revise the closure/post-closure plan to provide a detailed list of the structures and facility systems (e.g., monitoring wells, recovery wells, fencing, etc.) that must be maintained during the post closure care period. Include with the list the frequency of the inspections and the party responsible for conducting the inspections and any proposed maintenance schedule to ensure that site security remains adequate.

6. General Comment.

NECC shall revise the post-closure plan to include the name, address and phone number of the person or persons to contact about the facility during the post-closure care period. This person must maintain a copy of the post-closure/post-closure plan on-site during the post-closure care period.

7. General Comment.

NECC shall revise the closure/post-closure plan to include a statement that the company will submit to the Director of the Ohio EPA and to the local land authority, or authority with jurisdiction over land use, a record of the type, location, and quantity of hazardous wastes disposed within each disposal unit. This record will be filed by NECC no later than 60 days after the certification of closure of the disposal unit.

8. General Comment.

NECC shall revise the closure/post-closure plan to include a statement that the company shall record a notation on the deed to the facility property noting the property has been used to manage hazardous wastes, its use is restricted, and a survey plat and record of wastes have been filed with the Director of the Ohio EPA and the appropriate land use control authority.

Ground Water Monitoring and Recovery.

1. Based on the first determination, NECC has concluded that TCE has entered the ground water; therefore, in accordance with OAC 3745-65-93(D) (7) (a), NECC shall make determinations required by OAC 3745-65-93(D) (4) (i.e., NECC shall determine the rate and extent of migration of the contamination, and the concentration of any hazardous waste constituents in the ground water) on a quarterly basis until post-closure case is deemed complete by the Director. NECC shall also submit and implement a ground water quality assessment plan (as part of a revise closure/post-closure plan) to satisfy the requirements of OAC 3745-65-93(D) (3).
2. NECC has proposed to install two ground water recovery wells and three additional monitoring wells. These wells can be installed, but only as an interim measure. The final recovery and monitoring systems can only be decided upon after the rate and extent of contamination has been determined by means of the ground water quality assessment program.
3. The ground water monitoring parameter list for the ground water quality assessment program must include all the waste constituents associated with NECC's waste management activities and, at a minimum, include the following:
 - i. Indicator parameters of specific conductance, pH, and temperature.
 - ii. 1,2 Dichloroethane and Trichloroethylene (TCE)

Attachment A
National Electric Carbon Corporation
Page Four

- iii. The daughter compounds of TCE including cis 1,2-dichloroethane; trans 1,2 dichloroethane; 1,1-dichloroethane; and, vinyl chloride.
 - iv. Parameters indicating ground water quality including chloride, iron, manganese, phenols, sodium and sulfate.
4. The assessment shall also consider the potential impacts that TCE contamination from buildings 72 and 77 has had on the ground water at the former drum holding area.
5. The following comments refer to specific parts of Section II, Geology, in the November 1990 plan and shall be addressed in the ground water quality assessment plan to be submitted as part of the revised closure/post-closure plan:
- a. All of the boring logs and monitoring well logs referred to in the last paragraph on page 10 shall be included in the assessment program plan;
 - b. A location map shall be included in the assessment plan that shows the locations of all borings and monitoring wells referred to in the report (examples of wells/borings not depicted on a location map are: wells 209, 210, 213, 214, 216, 217, 224, 225, 227, 228 and 229 on Table 1; wells 409A and 410A on page 20; wells/borings 206, 207, 303 305, 307, 314, 316 and 331 on figures 6 and 7; and, wells BW 4-7 on figure 10);
 - c. The four "distinctive" unconsolidated material units listed on page 11 do not match the four unconsolidated material units on figures 6 and 7; specifically,
 - i. Unit number 4 (a permeable zone of sand, gravel and weathered dolomite) is not found on figures 6 and 7;
 - ii. The fill material shown on figure 6 and 7 is not listed as one of the four "distinctive" units on page 11;

- iii. A sandy silt unit is found below the silty sand at well/boring 307 and completely replaces the silty sand at well/boring 206 as depicted on figure 6. This unit is not described as one of four "distinctive" units on page 11; and
 - iv. The lower silty clay on page 11 is depicted as a silty clay and clayey silt on figure 7;
 - d. The ground water elevations used to construct the potentiometric surface map on figure 9 shall be included in the plan;
 - e. Potentiometric surface maps shall be constructed for each of the three saturated zones listed on page 16 of the plan;
 - f. The Ohio EPA recommends that water level measurements be taken monthly in order to determine temporal and seasonal fluctuations in the ground water flow direction; and
 - g. The locations of the "two major ground-water pumping centers" referred to on page 20 shall be added to the plan and NECC shall define the effect the pumping wells have on the ground water flow in order to determine an appropriate ground water monitoring and recovery system for the site.
6. The following comments refer to specific parts of Section III, Scope of Work, in the amended closure/post-closure plan:
- a. The description of the construction of a monitoring well on page 26 does not match the diagram of a typical monitoring well design on figure 11 (the construction of monitoring wells should follow the guidance in the U.S. EPA Technical Enforcement Guidance Document); therefore, NECC shall revise the closure/post-closure plan to include this information in the assessment program plan;

- b. NECC shall indicate the capture zone for the ground water recovery system in the assessment program plan (additional recovery wells may need to be installed after the ground water assessment has been initiated).
 - c. A statement is made on page 36 that "If there is insufficient recovery within a 48-hour period, the well will not be sampled". All wells shall be sampled. If there is an insufficient amount of water in a well after purging, the samplers should return (not to exceed 24 hours) to the well as many times as it is necessary to collect the proper samples;
 - d. Procedures for the plugging and abandoning of borings and wells, consistent with OAC 3745-9-10, shall be added to the assessment program plan;
 - e. Trip blanks shall be included as part of the field QA/QC program; and
 - f. Field blanks shall be collected for all of the parameters analyzed. The number of blanks should equal 10 percent of the ground water samples or one per day, whichever is greater.
7. The Ohio EPA cannot make a determination, at this time, as to whether or not the proposed closure is appropriate for the site. The submitted plan does not contain sufficient hydrogeologic information to allow for such a determination. As indicated in the above comments, the rate and extent of ground water contamination, the capture zones of the recovery wells, and all the boring logs shall be provided as part of the revised closure/post-closure plan.
8. A well log and drilling report also should be filed with the Ohio Department of Natural Resources, Division of Water, Ground Water Resources Section, for each well defined in Section 1521.01(B) of the Ohio Revised Code) within thirty (30) days after completion, as required by Section 1521.05 of the Ohio Revised Code. Responsibility

Attachment A
National Electric Carbon Corporation
Page Seven

for completing and filing these logs lies with the drilling contractor who installs the wells. However, the entity who hires the drilling contractor may choose to assume that responsibility. Section 1521.05 of the Ohio Revised Code requires that a well log form, as prescribed and prepared by the Division of Water, Ohio Department of Natural Resources, be completed for each well installed. All logs filed must be the original white copy. The well log form and information pertaining to its completion can be obtained from the Ohio Department of Natural Resources, Division of Water, Ground Water Resources Section, at (614) 265-6740.



ATIONAL®

NATIONAL ELECTRICAL CARBON CORPORATION

200 NORTH TOWN STREET, FOSTORIA, OHIO 44830

RECEIVED

SEP 29 1989

U. S. EPA, REGION V
SWB - PMS

Dr. Richard L. Shank, Director
Ohio EPA
1800 Watermark Drive
Columbus, OH 43266-0149

June 28, 1989

RECEIVED

JUL 07 1989

OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

RE: Closure Plan Extension

Dear Dr. Shank:

This letter is being submitted as a request for a 45 day extension to allow time to amend the closure plan for our interim status hazardous waste storage pad. The following is a brief update and justification for our request for extension.

National Electrical Carbon Corporation was granted a 120 day extension to complete the closure of our 25' x 25' hazardous waste storage pad on March 7, 1989 by Ohio EPA and subsequently by USEPA on April 4, 1989. Closure plan activities began on May 18, with removal of contaminated soil from areas designated in a "Remedial Activities" plan drafted by T.A. Gleason Associates (certified engineer for this project) and submitted to Janet Leite of the OEPA's Northwest District Office.

The excavation of trichloroethylene (TCE) contaminated soil, was more extensive than originally planned and actually involved four days of excavation. As each excavation phase was completed, a battery of exit samples was taken and analyzed. Exit samples after the final excavation of the remaining section detected 0.18 ppm, an increase from the previous sampling results from the same area of 0.030 ppm. This final zone, approximately 12' x 15', was excavated an additional depth of 15 inches bringing the total depth of this area to approximately four feet. Additional time will be needed to assess the implications of these results.

Due to these unanticipated developments, achieving a clean closure by the July 7th deadline will be impossible. Therefore, the 45 day extension will be necessary to allow time to submit an amended closure plan which addresses the following areas:

- 1 - Revisions of closure cost estimates
- 2 - The type of closure that can be achieved based on recent findings.
- 3 - Disposal of approximately 200 tons of TCE contaminated soil.

On behalf of National Electrical Carbon Corporation, I would like to express our appreciation for your consideration in this matter and also stress that we are anxious to proceed with subsequent steps required to attain closure. Please feel free to call me at (419) (419) 436-5923 if there are additional comments or questions.

Sincerely,



R. Michael Wentzel
Manager-Health, Safety,
and Environmental Affairs

RMW:smg

CC: Lisa Pierard, USEPA, Region V
Don North, OEPA Northwest Office



NATIONAL ELECTRICAL CARBON CORPORATION

200 NORTH TOWN STREET, FOSTORIA, OHIO 44830

March 13, 1989

Lisa Pierard
USEPA, Region V
230 South Dearborn
Mail Code 5HR-13
Chicago, IL 60604

RECEIVED

MAR 20 1989

OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Dear Ms. Pierard:

This letter is in follow-up to our conversation on March 9, 1989 and to serve as a formal request from National Electrical Carbon Corporation (NECC) for a 120 day extension to complete closure of our hazardous storage pad. This request was approved by Ohio EPA on March 7, 1989.

We are requesting this extension in order to have ample time to complete the clean-up and proper disposal of soil that is contaminated with trichloroethylene and RCRA listed metals. The contamination was detected as a result of our initial closure activities performed on November 29, 1988. A copy of the report is enclosed which details these activities as well as our plan to address clean-up and disposal of the contaminated soil. This report has also been sent to Ohio EPA.

NECC is very anxious to begin clean-up activities on or about April 17th. Hopefully, as you indicated in our conversation, the review and subsequent approval of the 120 day extension request will occur relatively soon so that we can meet this projected start date.

Thank you for your promptness in returning my call and I appreciate your efforts to expedite our request. Please feel free to call me at (419) 436-5923 if you have questions or comments.

Sincerely,

R. Michael Wentzel
Manager-Health, Safety
and Environmental Affairs

RMW:smg



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149



Bruce

CLOSURE PLAN EXTENSION APPROVAL

RECEIVED
MAR 13 1989

Richard F. Celeste
Governor

CERTIFIED MAIL

March 7, 1989

OFFICE OF RCRA
Waste Management Division
U.S. EPA Region V
Re: Closure Plan Extension Request
National Electric Carbon Corporation
OHD 004 167 219/03-74-0395

R. Michael Wentzel, Manager
Health, Safety, and Environmental Affairs
National Electric Carbon Corporation
200 North Town Street
Fostoria, Ohio 44830

Dear Mr. Wentzel:

On December 27, 1988, National Electric Carbon Corporation submitted a request for an extension to the closure period specified in the approved closure plan for 120 days. The extension request was submitted pursuant to OAC Rule 3745-66-13(B) as closure will require longer than the 180 days period specified in OAC Rule 3745-66-13. National Electric Carbon Corporation has requested this extension due to the discovery of soil contamination around the hazardous waste storage pad.

Therefore, closure of the hazardous waste storage pad will require greater than 180 days to allow for additional soil sampling and removal of contaminated soil. National Electric Carbon Corporation will continue to take all steps to prevent a threat to human health and the environment from the closed but inactive waste management unit per OAC Rule 3745-66-13(B)(2).

The public was given the opportunity to submit written comments regarding the request for an extension to the closure period for National Electric Carbon Corporation in accordance with OAC Rule 3745-66-13. The public notice appeared in the week of January 16, 1989, in the Advertiser Tribune. No comments were received in this matter.

An extension of time allowed for closure is hereby granted.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Pat Evans 3-7-89

Ohio Environmental Protection Agency
ENTERED DIRECTOR'S JOURNAL

MAR -7 1989

Because the Ohio EPA is not currently authorized to conduct the federal hazardous waste program in Ohio, your closure time extension request also must be reviewed and approved by the USEPA. Federal RCRA closure regulations (40 CFR 265.112) require that you submit a request for extension to Lisa Pierard, Chief, Waste Management Division, Technical Programs Section, Ohio Unit, USEPA, Region V, 5HS-13, 230 South Dearborn Street, Chicago, Illinois 60604. If the closure period specified in the approved closure plan has passed, approval by both agencies is necessary prior to continuation of activities required by the approved closure plan.

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and a registered professional engineer that the facility has been closed in accordance with the approved closure plan. The owner or operator certification shall follow the format specified in OAC 3745-50-42(D). These certifications should be submitted to: Ohio Environmental Protection Agency, Division of Solid and Hazardous Waste Management, Attn: Tom Crepeau, Program Planning and Management Section, P.O. Box 1049, Columbus, Ohio 43266-1049.

You are notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency and the Environmental Enforcement Section of the Office of the Attorney General within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address: Environmental Board of Review, 250 East Town Street, Room 101, Columbus, Ohio 43266-0557.

Sincerely,



Richard L. Shank, Ph.D.
Director

RLS/RM/pas

cc: Tom Crepeau, DSHWM Central File, Ohio EPA
Lisa Pierard, USEPA, Region V
Janet Leite, NWCDO, Ohio EPA
Randy Meyer, DSHWM, Ohio EPA

1793U

I certify this to be a true and correct copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Pat Evans Date 3-7-89

Ohio Environmental Protection Agency
ENTERED DIRECTOR'S JOURNAL

MAR -7 1989

11 AUG 1988

CERTIFIED MAIL *P707 061 668*
RETURN RECEIPT REQUESTED

Mr. R. Michael Wentzel
National Electrical Carbon Corporation
200 North Town Street
Fostoria, Ohio 44830

5HR-13

RE: Closure Plan
Drum Storage Pad
National Electrical
Carbon Corporation
OHD 004 156 219

Dear Mr. Wentzel:

This is reference to the revised closure plan that the Ohio Environmental Protection Agency (OEPA) received on February 29, 1988, from the National Electrical Carbon Corporation. The closure plan is for a hazardous waste drum storage pad located at 200 North Town Street in Fostoria, Ohio. The United States Environmental Protection Agency (U.S. EPA), received a copy of the plan on March 1, 1988.

The OEPA approved the plan in a letter dated April 18, 1988. The U.S. EPA is in concurrence with the OEPA's review and approval. U.S. EPA approves the closure plan with the conditions stipulated by the OEPA.

Approval of this closure plan, however, does not release the National Electrical Carbon Corporation from the corrective action provisions as described under the Hazardous and Solid Waste Amendments of 1984. Such provisions require corrective action for all releases of hazardous waste or hazardous waste constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

If you have any further questions, please do not hesitate to contact Mr. Bruce Sypniewski of my staff, at (312) 886-6189.

Sincerely,

Karl E. Bremer, Chief
RCRA Permitting Branch

cc: Thomas Crepeau, DSHWM, Ohio EPA
Rod Miller, NWDO, Ohio EPA
Rebecca Strom, OR, RPB, OH Sect.
Chuck Hull, NWDO, Ohio EPA
Bruce Sypniewski, OR, RPB, Ohio Section

LEP 8/10/88

RCRA PERMITS	TYP.	AUTH.	IL. CHIEF	IN. CHIEF	MI. CHIEF	MN/WI CHIEF	OH. CHIEF	RPB CHIEF	O.R. A.D.D.	WMD DIR
INIT. DATE	<i>PB 8/9/88</i>	<i>[Signature] 3-9-88</i>					<i>[Signature]</i>	<i>[Signature]</i>		



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149



Richard F. Celeste
Governor

CERTIFIED MAIL

April 18, 1988

Re: CLOSURE PLAN
NATIONAL ELECTRIC CARBON CORP.
OHD004167219, 03-74-0385

Mr. R. Michael Wentzel
National Electric Carbon Corp.
200 North Town Street
Fostoria, Ohio 44830

Dear Mr. Wentzel:

On June 5, 1987, National Electric Carbon Corporation submitted to Ohio EPA a closure plan for a drum storage pad located at 200 North Town Street, Fostoria, Ohio. Revisions to the closure plan were received on February 29, 1988. The closure plan was submitted pursuant to Rule 3745-66-12 of the Ohio Administrative Code (OAC) in order to demonstrate that National Electric Carbon Corporation's proposal for closure complies with the requirements of OAC Rules 3745-66-11 and 3745-66-12.

The public was given the opportunity to submit written comments regarding the closure plan of National Electric Carbon Corp. in accordance with OAC Rule 3745-66-12. No comments were received by Ohio EPA in this matter.

Based upon review of the company's submittal and subsequent revisions, I conclude that the closure plan for the hazardous waste facility at National Electric Carbon Corp. meets the performance standard contained in OAC Rule 3745-66-11 and complies with the pertinent parts of OAC Rule 3745-66-12.

The closure plan submitted to Ohio EPA by National Electric Carbon Corp. is hereby approved with the following modification:

The facility's closure plan mentions placing rinsewaters with less than 1 mg/l of solvent (which is considered non-hazardous) in to the sanitary sewer system. National Electric Carbon Corp. shall ensure that these non-hazardous rinsewaters shall meet industrial pretreatment standards.

Please be advised that approval of this closure plan does not release National Electric Carbon Corp. from any responsibilities as required under the Hazardous and Solid Waste Amendments of 1984 regarding corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Natasha Davis Date 4-18-88

Ohio Environmental Protection Agency
ENTERED DIRECTOR'S JOURNAL

APR 18 1988

Mr. R. Michael Wentzel

Page Two

April 18, 1988

Due to the fact that the Ohio EPA is not currently authorized to conduct the federal hazardous waste program in Ohio, your closure plan also must be reviewed and approved by USEPA. Federal RCRA closure regulations (40 CFR 265.112) require that you submit a closure plan to George Hamper, Chief, Waste Management Division, Technical Programs Section, Ohio Unit, USEPA, Region V, 5HS-13, 230 South Dearborn Street, Chicago, Illinois 60604. Approval by both agencies is necessary prior to commencement of activities required by the approved closure plan. If closure activities will, of necessity, take longer than 180 days to complete in order to allow for a period of time for review and approval by USEPA, a longer closure period is hereby approved pursuant to OAC rule 3745-66-13(B) provided National Electric Carbon Corp. shall commence closure upon receipt of this approval by Ohio EPA or upon receipt of approval by USEPA, whichever occurs later. The closure period shall not exceed 180 days beyond the latter approval.

You are notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency and the Environmental Enforcement Section of the Office of the Attorney General within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address: Environmental Board of Review, 236 East Town Street, Room 300, Columbus, Ohio 43266-0557.

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and a registered professional engineer that the facility has been closed in accordance with the approved closure plan. The certification by the owner or operator shall include the statement found in OAC 3745-50-42(D). These certifications should be submitted to: Richard L. Shank, Director, Ohio Environmental Protection Agency, Attn: Thomas Crepeau, Program Planning and Management Section, Division of Solid and Hazardous Waste Management, P.O. Box 1049, Columbus, Ohio 43266-0149.

Sincerely,



Richard L. Shank, Ph.D.
Director

RLS/PV/ara

cc: Thomas Crepeau/DSHWM Central File, Ohio EPA
Rebecca Strom, USEPA, Region V
Rod Miller, NWDO, Ohio EPA
Chuck Hull, NWDO, Ohio EPA
Paul Vandermeer, DSHWM, Ohio EPA

Ohio Environmental Protection Agency
ENTERED DIRECTOR'S JOURNAL

APR 18 1988

1370U

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Notice Davis Date 4-18-88



NATIONAL ELECTRICAL CARBON CORPORATION

200 NORTH TOWN STREET, FOSTORIA, OHIO 44830

February 23, 1988

Mr. Thomas Crepeau
Ohio Environmental Protection Agency
Division of Solid and Hazardous
Waste Management
P.O. Box 1049
Columbus, OH 43266-0149

RECEIVED
MAR 03 1988
U.S. EPA
SOLID WASTE DIVISION
SUBJECT: Modified Closure Plan for
National Electrical Carbon Corp.
EPA ID No. OHD004167219

Dear Mr. Crepeau:

This letter and accompanying enclosures are in response to a letter (dated January 26, 1988) from Richard L. Shank, informing my company, National Electrical Carbon Corporation, that the closure plan for our hazardous waste drum storage pad has been disapproved. An attachment to the above referenced letter further outlined specific areas of the closure plan which would require modifications in order to comply with the requirements contained in OAC Rule 3745-66-11 and OAC-3745-66-12.

Pursuant to compliance with the eleven items noted on the attachment, I am submitting a modified closure plan which I hope adequately addresses your requirements. Essentially, I have incorporated the information requested as an addendum to each closure plan section without changing the format or the contents of that which was originally submitted in June, 1987.

Furthermore, as stated in previous correspondences regarding our attempts to complete closure, we will continue to utilize this storage pad for the accumulation of hazardous waste for less-than-90-day storage. We have been operating in this mode since June, 1987.

We are looking forward to closure plan approval so that we may progress with its implementation and subsequently resubmit a formal request for the withdrawal of our hazardous waste permit. Please feel free to contact me at (419) 436-5923 if there are any questions or comments.

Sincerely,

R. Michael Wentzel
Mgr., Health, Safety,
and Environmental Affairs

CC: Mr. George Hamper, USEPA, Region V
Mr. Rod Miller, NWDO, Ohio EPA



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149



Richard F. Celeste
Governor

Issuance Date January 26, 1988
Effective Date February 26, 1988

CERTIFIED MAIL

January 26, 1988

Re: CLOSURE PLAN
NATIONAL ELECTRICAL CARBON CORP.
OHD004167219

Mr. R. Michael Wentzel
National Electrical Carbon Corp.
200 North Town Street
Fostoria, Ohio 44830

Dear Mr. Wentzel:

On June 5, 1987, National Electrical Carbon Corp. submitted to Ohio EPA a closure plan for a hazardous waste drum storage pad located at 200 North Town Street, Fostoria, Ohio. The closure plan was submitted pursuant to Rule 3745-66-12 of the Ohio Administrative Code (OAC) in order to demonstrate that National Electrical Carbon Corp.'s proposal for closure complies with the requirements of OAC Rules 3745-66-11 and 3745-66-12.

The public was given the opportunity to submit written comments regarding the closure plan of National Electrical Carbon Corp. in accordance with OAC Rule 3745-66-12. The public comment period extended from August 28, 1987 to September 30, 1987. No comments were received by Ohio EPA in this matter.

Based upon review of the company's submittal and subsequent revisions, I conclude that the closure plan for the hazardous waste facility at National Electrical Carbon Corp. does not meet the performance standard contained in OAC Rule 3745-66-11 and does not comply with the pertinent parts of OAC Rule 3745-66-12.

The closure plan submitted to Ohio EPA by National Electrical Carbon Corp. is hereby disapproved.

Due to the fact that the Ohio EPA is not currently authorized to conduct the federal hazardous waste program in Ohio, your closure plan also must be reviewed by USEPA. Federal RCRA closure regulations (40 CFR 265.112) require that you submit a closure plan to George Hamper, Chief, Waste Management Division, Technical Programs Section, Ohio Unit, USEPA, Region V, 5HS-13, 230 South Dearborn Street, Chicago, Illinois 60604. Review and approval of the closure plan by both agencies is necessary prior to commencement of activities required by the approved closure plan.

Mr. R. Michael Wentzel
Page Two
January 26, 1988

You are notified that this action of the Director is issued as a proposed action pursuant to ORC Section 3745.07. This action will become final on the effective date indicated unless you or an objector files an appeal requesting an adjudication hearing within thirty (30) days of the date of issuance of this action. The adjudication hearing will be conducted in accordance with OAC Chapter 3745-47. The request for a hearing shall specify the issues of fact and law to be contested. Requests for hearings shall be sent to: Ohio Environmental Protection Agency, Hearing Clerk, 1800 WaterMark Drive, P.O. Box 1049, Columbus, Ohio 43266-0149.

A modified closure plan must be submitted to the Director of the Ohio EPA for approval within thirty (30) days of the receipt of this letter in accordance with OAC 3745-66-12. The modified closure plan should be submitted to: Ohio Environmental Protection Agency, Division of Solid and Hazardous Waste Management, Attn: Thomas Crepeau, Program Planning and Management Section, P.O. Box 1049, Columbus, Ohio 43266-0149. A copy should also be sent to: Rod Miller, Northwest District Office, Ohio EPA, 1035 Devlac Grove Drive, Bowling Green, Ohio 43402.

Sincerely,



Richard L. Shank, Ph.D.
Director

RLS/RM/ara

Attachment

cc: Thomas Crepeau/DSHWM Central File, Ohio EPA
Rebecca Strom, USEPA, Region V
Rod Miller, NWDO, Ohio EPA
Bruce Sypniewski, USEPA, Region V
Randy Meyer, DSHWM, Ohio EPA

1573U



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149

LDF



Richard F. Celeste
Governor

September 25, 1987

Re: Union Carbide Corporation
TSD ✓ OHD004167383 & OHD003926740 ?
L-Tech Company 00 8
OHD000221454
National Electric Carbon Corp.
✓ OHD004167219

John F. Fleming, V.P.
Chemical Bank
Corporate Trust Dept.
55 Water St., Room 1820
New York NY 10041

Dear Mr. Fleming:

I have received the Trust Agreement from Chemical Bank for the above referenced facilities submitted to demonstrate compliance with Ohio rule's which require financial assurance for closure/post closure costs.

In reviewing the submittal, I noted that a valuation of the closure trust fund had not been included. An annual valuation of the closure trust fund is necessary to comply with Ohio Administrative Code (OAC) 3745-66-43 governing financial assurance requirements.

Consequently, please send to my attention a valuation of the closure trust fund by October 25, 1987, which will enable my review of the submittal to continue.

If you have any questions, please call me at (614)481-7227.

Sincerely,

Susan McDowell

Susan McDowell
S&E Section, DSHWM

SM/drr

1829S(19)

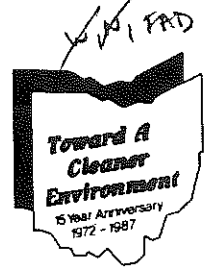
cc: Dave Sholtis, CO
Dave Wertz, NEDO
Chuck Hull, NWDO
C. A. O'Boyle, Union Carbide
Central Office
RF



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149

LDF



Richard F. Celeste
Governor

September 25, 1987

Re: ☒ Union Carbide Corporation
☒ OHD004167383 & OHD003926740 ?
L-Tech Company 00 8
OHD000021454
☒ National Electric Carbon Corp.
☒ OHD004167219

John F. Fleming, V.P.
Chemical Bank
Corporate Trust Dept.
55 Water St., Room 1820
New York NY 10041

Dear Mr. Fleming:

I have received the Trust Agreement from Chemical Bank for the above referenced facilities submitted to demonstrate compliance with Ohio rule's which require financial assurance for closure/post closure costs.

In reviewing the submittal, I noted that a valuation of the closure trust fund had not been included. An annual valuation of the closure trust fund is necessary to comply with Ohio Administrative Code (OAC) 3745-66-43 governing financial assurance requirements.

Consequently, please send to my attention a valuation of the closure trust fund by October 25, 1987, which will enable my review of the submittal to continue.

If you have any questions, please call me at (614)481-7227.

Sincerely,

Susan McDowell

Susan McDowell
S&E Section, DSHWM

SM/drr

1829S(19)

cc: Dave Sholtis, CO
Dave Wertz, NEDO
Chuck Hull, NWDO
C. A. O'Boyle, Union Carbide
Central Office
RF



State Of Ohio Environmental Protection Agency

Box 1049, 361 East Broad St., Columbus, Ohio 43216-1049
(614) 466-8565



Richard F. Celeste, Governor

RE: Union Carbide Corporation

OHD 004167219

OHD 004167383

OHD 003926748

OHD 077479467

OHD 000821454

Mr. H. M. Parker
Assistant Director,
Environmental Affairs
Union Carbide Corporation
Old Ridgebury Road
Danbury, Connecticut 06817

July 28, 1986

Dear Mr. Parker:

I hereby acknowledge the receipt of a 1986 financial test demonstration. Ohio EPA has completed its review of Union Carbide's 1986 RCRA financial test submission. Union Carbide appears to adequately meet the financial test criteria at this time. Consequently, the facilities referenced above are in compliance with Ohio's financial responsibility rules for closure.

If you have any questions, please contact me at
(614) 462-8949.

Sincerely,

Edward A. Kitchen
Surveillance & Enforcement Section
Division of Solid & Hazardous
Waste Management

cc: Dave Sholtis, DSHWM
Albert R. Fritz, Union Carbide
D. A. Miekowski, Union Carbide
Edwin E. Frye, Union Carbide
R. L. Johnson, Union Carbide
R. C. Hazelton, Union Carbide
Dave Wertz, NEDO
Ben Chambers, NWDO
Steve Hamlin, SEDO

Marsh & McLennan, Incorporated
1221 Avenue of the Americas
New York, New York 10020
Telephone 212 997-2000

February 27, 1986

RECEIVED

FEB 28 1986

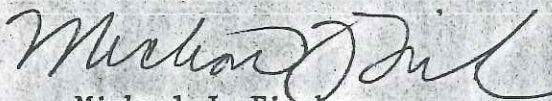
To Whom it May Concern:

Re: Union Carbide Corporation
Pollution Liability Insurance

We are pleased to enclose a Hazardous Waste Facility Liability Certificate in accordance with EPA regulations.

This certificate replaces the certificate on file with American Motorists which expired January 1, 1986.

Sincerely,



Michael J. Fischer
Assistant Vice President

MJF/sp

U.S. ENVIRONMENTAL PROTECTION AGENCY
WASTE MANAGEMENT
OFFICE OF

Hazardous Waste Facility Certificate of Pollution Liability Insurance

1. Continental Insurance Company, (the "Insurer"), of 180 Maiden Lane, New York, New York 10038 hereby certifies that it has issued pollution liability insurance covering bodily injury and property damage to Union Carbide Corporation, (the "insured"), of Old Ridgebury Road, Danbury, CT 06817 in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at:


<u>Location Name</u>	<u>Address</u>	<u>EPA I.D. #</u>
Films Packaging Division	Town Street Fostoria, OH 44830	<u>OHD-004167219</u>
Carbon Products Division	11709 Madison Avenue Lakewood, OH 44107	OHD-004167383
Electrode Systems Division	12900 Snow Road Parma, OH 44130	OHD-003926748
Specialty Polymers & Composites Division	Marietta, OH	OHD-077479467

For: sudden and nonsudden accidental occurrences.

The limits of liability are \$4,000,000 each occurrence and \$8,000,000 aggregate, exclusive of legal defense costs. The coverage is provided under policy number TBA, issued on 2/27/86. The effective date of said policy is 1/1/86.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:
- (a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.
 - (b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured

TBE OHD 004 167 219

 The London Agency, Inc.

1230 W. Peachtree St., N. W.
P. O. Box 4985
Atlanta, Georgia 30302
(404) 875-9641
Telex 54-2445
TWX 810 751-3329

March 23, 1983

Regional Administrator
Environmental Protection Agency
Region I
230 S. Dearborn
Chicago, IL 60604

ADDITIONAL INFORMATION
IS FILED WITH
OHD 000 821 454

Gentlemen:

Hazardous Waste Facility
Certificate of Liability Insurance
Union Carbide Corporation
EPA #OHD-000821470, ILD-005152954, 000821454
ILD-000821462, OHD-077479467, OHD-00821454,
IND-077001147, OHD-000821462, OHD-004167219,
OHD-004167383, OHD-003926748, IND-000708545

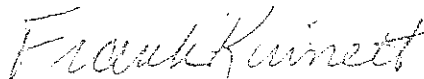
In accordance with the terms of the Hazardous Waste Facility Certificate of Liability Insurance which we recently issued to your office, we are hereby notifying you of the expiration of this contract on April 30, 1983, in accordance with the provisions of Item 2 (e).

To assist you in matching up this notification with the original certification which was sent to you, I am enclosing a copy of the original certificate which we executed.

We feel that it is likely that this insured will purchase another policy at the renewal date but, because the renewal negotiation process has not been completed, we have no option but to give you the required advance notice of expiration of our coverage on April 30, 1983.

If renewal negotiations are satisfactorily completed, we will provide new certificates.

Sincerely,



Frank Kinnett
Vice President
International Insurance Company

bm

Enc.

ATTACHMENT

NATIONAL ELECTRICAL CARBON CORPORATION

1. Provide a short description of the facility. Include type of industry, products, location, size and other information pertinent to closure of the storage pad.
2. Indicate that closure shall be completed within 180 days of the Director's approval unless an extension is requested, justified and approved as part of the closure plan. Include a specific closure schedule showing the amount of time required to complete each critical activity (e.g., removal of hazardous waste inventory, cleaning pad, etc.).
3. Indicate that Ohio EPA's facility inspector will be contacted at least five (5) business days in advance of certain critical activities, such as pad cleaning, so that the inspector may be present to observe these activities.
4. Indicate that rinseate samples from the pad shall be analyzed for all RCRA regulated waste solvents stored on the pad. Rinseates and the pad shall be considered contaminated if the rinseates contain greater than 1 mg/l of any RCRA regulated waste solvents. Rinseates exceeding the 1 mg/l criterion for any RCRA regulated waste solvent shall be managed as hazardous waste.
5. Indicate that soils located around the perimeter of the storage facility, including stormwater receiving areas, shall be sampled and analyzed individually for any RCRA regulated waste solvents stored on the pad. Include the number of samples to be collected, depth of sample collection, and the precise location of sampling points on a map of the storage area.
6. Indicate that soils surrounding the storage pad shall be considered contaminated and managed as hazardous waste if soil sample results indicate the presence of any RCRA regulated waste solvent at greater than the compound's analytical detection limit. Detection limits shall be taken from the analytical method as described in USEPA Publication SW-846, "Test Methods for Evaluating Solid Wastes." Soil sampling shall continue until the full extent of contamination is determined. Additional soil samples shall be collected and analyzed after notifying Ohio EPA in the event that the first set of samples detects contamination.
7. Provide an engineering drawing of the storage pad and discuss how runoff is managed. Include a cross-section of any secondary containment/runoff control structures and details of any drains or other means of handling rainwater. Note the location of any discharge points on a topographic map of the facility.
8. Demonstrate that the laboratory contracted to analyze rinseate and soil samples has a QA/QC program.

9. Indicate that National Electrical Carbon Corporation and an independent registered engineer shall certify closure of the storage pad according to OAC 3745-50-42. National Electrical Carbon Corporation's certification statement shall include the wording found in OAC 3745-50-42(D).
10. Indicate that the independent engineer shall be present during all critical closure activities. The frequency of inspections by the independent engineer shall be sufficient to determine the adequacy of each critical activity.
11. Indicate that a written hazardous waste permit withdrawal request shall be submitted to the Director of Ohio EPA after closure is completed and certified. Hazardous waste permit withdrawals should be requested in correspondence separate from closure plan correspondence, and should follow procedures specified in OAC 3745-50-47.

1573U



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149

RECEIVED

AUG 31 1987

SOLID WASTE DIVISION
U.S. EPA, REGION V



Richard F. Celeste
Governor

August 27, 1987

Re: National Electrical Carbon Corp.
Closure Plan
US EPA ID No.: OHD004167219
Ohio Permit No.: 03-74-0385

National Electrical Carbon Corporation
Attn: R. Michael Wentzel
200 N. Town Street
Fostoria, Ohio 44830

RECEIVED

SEP 01 1987

U. S. EPA, REGION V
SWB - PMS

Dear Sir:

A public notice acknowledging the Ohio EPA's receipt of a closure plan for National Electrical Carbon Corporation in Fostoria, Ohio will appear the week of August 24, 1987, in The Advertiser Tribune, Tiffin, Ohio. The Director of the Ohio EPA will act upon the closure plan request following the close of the public comment period, September 30, 1987.

Copies of the closure plan will be available for public review at the Tiffin-Seneca Public Library, 77 Jefferson Street, Tiffin, Ohio 44883 and the Ohio EPA, Northwest District Office, 1035 Devlac Grove Drive, Bowling Green, Ohio 43402.

Please contact me at (614) 481-7217, if you have any questions concerning this matter.

Sincerely,

Thomas E. Crepeau

Thomas E. Crepeau
Program Planning and Management Section
Division of Solid & Hazardous Waste Management

TEC/dhs

cc: Rebecca Strom, U.S. EPA, Region V
Dan Fisher, Ohio EPA, DSHWM, TA&ES
Rod Miller, Ohio EPA, DSHWM, NWDO
Bruce Sypniewski, US EPA, Region V

1013R

PUBLIC NOTICE

Seneca County

RECEIPT OF HAZARDOUS WASTE CLOSURE PLAN

For: National Electric Carbon Corporation, U.S. EPA ID No.: OHD004167219, Ohio Permit No.: 03-74-0385, 200 N. Town Street, Fostoria, Ohio 44830. Pursuant to OAC Rule 3745-66-10 thru 17 and 40 CFR, Subpart G, 265.110 thru 117, the Ohio Environmental Protection Agency (Ohio EPA) is hereby giving notice of the receipt of a Hazardous Waste Facility Closure Plan for the above referenced facility. Ohio EPA is also giving notice that this facility is subject to a determination concerning corrective action, a requirement under the Hazardous and Solid Waste Amendments of 1984, which concerns any possible uncorrected releases of hazardous waste or hazardous constituents to the environment from any current or previous solid waste management units at the above facility. A corrective action determination is required from hazardous waste facilities intending to close.

Copies of the facility's Closure Plan will be available for public review at the Tiffin-Seneca Public Library, 77 Jefferson Street, Tiffin, Ohio 44883 and the Ohio EPA, Northwest District Office, 1035 Devlac Grove Drive, Bowling Green, Ohio 43402.

Comments concerning the Closure Plan or factual information concerning any releases of hazardous waste or hazardous waste constituents by the above facility requiring corrective action should be submitted within 30 days of this notice to: Ohio Environmental Protection Agency, Div. of Solid & Hazardous Waste Mgmt., Program Planning and Management Section, Attn: Thomas E. Crepeau, Box 1049, Columbus, Ohio 43266-0149.



ATIONAL®

NATIONAL ELECTRICAL CARBON CORPORATION

200 NORTH TOWN STREET, FOSTORIA, OHIO 44830

June 5, 1987

RECEIVED

JUN 08 1987

SOLID WASTE DIVISION
U.S. EPA, REGION V

Mr. Chuck Hall
Ohio EPA
Northwest District Office
Division of Solid and Hazardous
Waste Management
1035 Devlac Grove Drive
Bowling Green, OH 43402

JUN 11 1987

U.S. EPA, REGION V

Dear Mr. Hall:

Per our conversation on June 3rd, National Electrical Carbon Corporation's Fostoria facility (formerly owned by Union Carbide Corporation), USEPA I.D. Number OHD004167219, does not intend to pursue its Hazardous Waste Installation and Operation Permit and is, therefore, formally submitting its closure plan for your review. Also, please be advised that the Fostoria plant will continue to generate hazardous waste and utilize this storage facility for the accumulation of waste for our 90 day generator requirements/status.

Regarding the current status of wastes stored in the storage facility we have no hazardous waste in which the "placed in storage" date exceeds 90 days. Specifically, we currently have only four (55) gallon drums of scrap trichloroethylene on hand.

I will look forward to your correspondence regarding implementation of the closure plan and ultimately a change in our storage facility status to that of a 90 day generator. Please call me at (419) 435-8182 (ext. 323) if you have any questions or comments.

Sincerely,

R. Michael Wentzel
Administrator, Health, Safety,
and Environmental Affairs

RMW:nko

Enclosures

cc: Mr. Bruce Sypniewski, Chicago, IL
Mr. Peter Wilkins

March 4, 1985
Rev. June 3, 1987

APPENDIX G

HAZARDOUS WASTE REGULATIONS
CLOSURE AND POST-CLOSURE

CLOSURE PLAN

NATIONAL ELECTRICAL CARBON CORPORATION
(Formerly UNION CARBIDE CORPORATION)

FACILITY: Fostoria

ADDRESS: 200 North Town St.
Fostoria, OH 44830

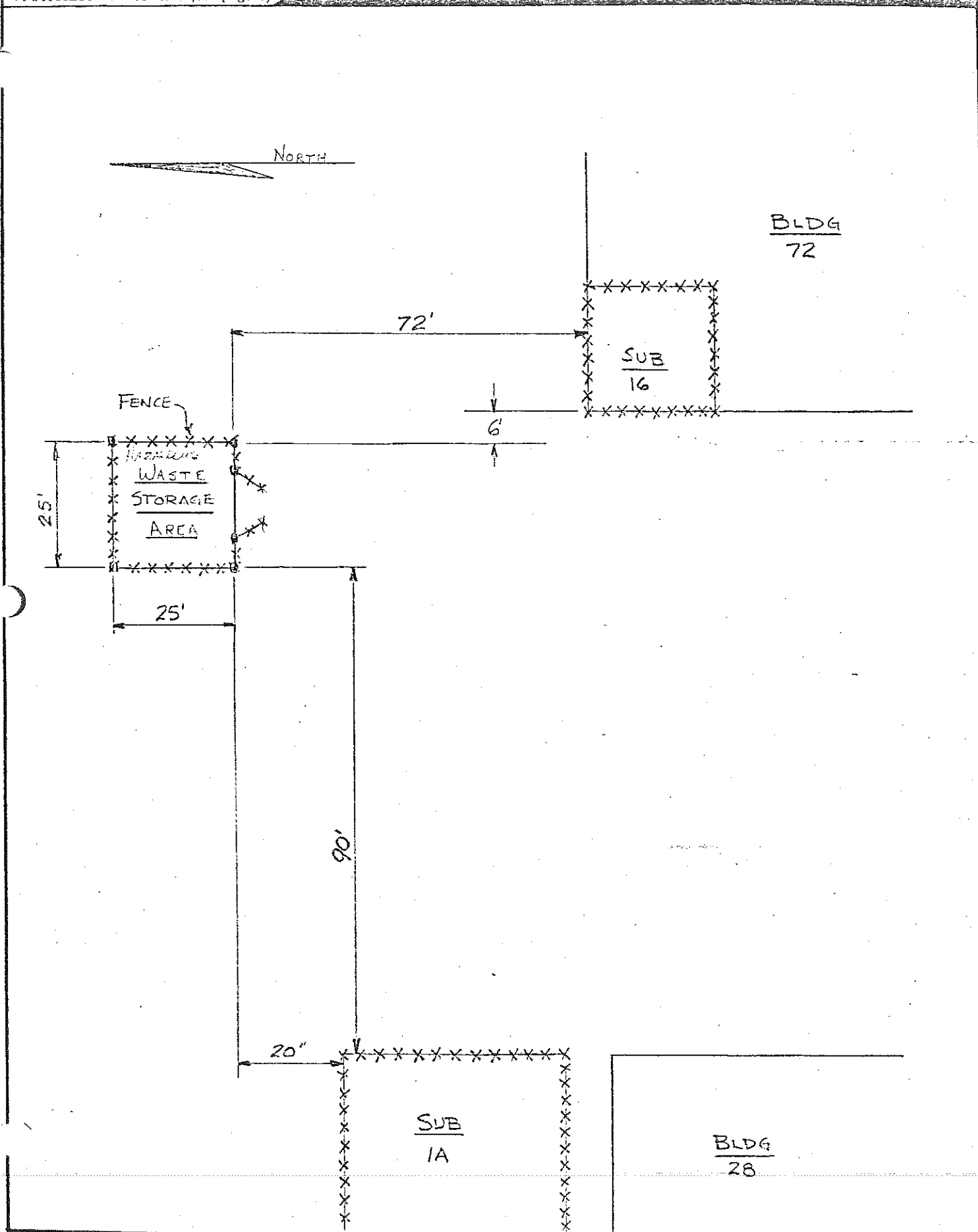
EPA ID NO. OHDO04167219

PREPARED BY: R. M. Wentzel
TELEPHONE NO. (419) 435-8182, Ext. 323

TYPE AND NUMBER OF FACILITIES (Attach diagram showing location of each)

- I. One fenced storage area (25' x 25' = 625 sq. ft.) with a concrete pad. The storage area has a capacity of 200 drums of hazardous waste stacked on pallets (4 drums per pallet). See attached sketch.

V. FACILITY DRAWING (see page 4)



CLOSURE PLAN (Cont.)A - For Each Activity:

Explain how the listed requirements for specific types of treatment, storage, or disposal (TSD) facilities (e.g., landfill incineration) will be met (refer to Attachment 1): (Add Pages as needed)

1. The fenced concrete pad is used to store hazardous waste material in 55 gallon drums. All drums of hazardous waste material will be disposed of according to Federal EPA Regulations. The storage area will be completely void of waste material.
(Note: All liquid Trichloroethylene is reclaimed.)

CLOSURE PLAN (Cont.)

B - Explain how §265.111 Closure Standards will be met.

Standard (a) - Minimizes the need for further maintenance:

1. The concrete pad will be thoroughly cleaned and checked to insure that no hazardous waste material is present. The fence and concrete pad will be left on site.

Standard (b): Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste and constituents, leachate, contaminated rainfall, or waste decomposition products to the groundwater, surface water, or to the atmosphere:

1. The fenced concrete pad will be thoroughly cleaned. The structure will be left on site.

CLOSURE PLAN (Cont.)

C- Describe how and when the facility will be partially closed, if applicable, and ultimately closed:

PARTIAL CLOSURE (If Applicable)

<u>Planned Time(s)</u>	<u>How Partially Closed</u>
1. N/A	N/A because the plant operations will continue to generate some hazardous waste that must be stored according to EPA regulations. Therefore, this area will remain operative until the plant is closed.

FULL CLOSURE

<u>Planned Time(s)</u>	<u>How Closed</u>
1.	<p>The fenced storage pad will continue being used until the plant is shut down. This storage area contains 55 gallon drums of hazardous materials that are placed on pallets. All drums of hazardous material will be disposed of according to Federal EPA Regulations.</p> <p>Approximately 50 drums of Trichloroethylene will be removed for the purpose of reclaiming. We are currently under contract with Safety-Kleen Corp., 581 Milliken S.E. in Hebron, Ohio 43025.</p> <p>Approximately 4 drums of scrap Furfural will be incinerated by an EPA approved company.</p> <p>Approximately 50 drums of Asbestos will be disposed of to an approved landfill. Currently to Evergreen Landfill 2625 East Broadway Northwood, Ohio 43619.</p>

CLOSURE PLAN (Cont.)

D - §265.112(a)(2) (Pg 33242) - Estimate the maximum inventory of wastes in storage or in treatment at any given time during the life of facility:

MAXIMUM QUANTITY IN STORAGE		
<u>EPA WASTE NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY (LB)</u>
F001	Spent Trichloroethylene	30,000
U125	Scrap Furfural	1,000
N/A	Asbestos	2,000

E - §265.112(a)(3) (Pg 33242) - Describe the steps needed to decontaminate facility equipment during closure:

The storage facility will be thoroughly cleaned by plant personnel and inspected by a certified professional engineer. Steps for decontamination would be as follows:

1. Sweep and rinse(wash if necessary), contain, and sample.
2. Repeat if warranted(pending results of sampling). Based on these procedures and the characteristics and nature of the materials contained in the storage facility we expect zero contamination.

CLOSURE PLAN (Cont.)

F - §265.112(a)(4) (Pg 33242) - Provide Schedule for Final Closure:

<u>ACTION</u>	<u>ANTICIPATED DATE</u>
1. Stop generating and storing hazardous wastes - stop all plant operations.	Unknown
2. Partial Closure (I)	N/A
3. Properly dispose of all hazardous wastes in storage. <u>(This must be done within 90 days of the date that the final volume of hazardous waste is placed in the storage area. §265.113 (a) (Pg. 33242).</u>	Unknown
4. Complete final closure - (This must be done within six months of the date that the final volume of waste is placed in the storage area. § 265.113(b), (Pg. 33242).	Unknown

MAXIMUM CLOSURE COST FOR
THE HAZARDOUS WASTE STORAGE AREA

ASSUME: A maximum of 200 drums in the storage area. This is the capacity of the storage area.

<u>Description</u>	<u>Cost (\$)</u>
1. 5 man-hours to unload, sweep and rinse the storage area X \$11.55/ man hour.	\$57.75
2. Sample and analyze drums for corrosiveness, ignitability, EP toxicity and reactivity.	\$3000.00
3. Transportation and disposal of all drums at \$100.00/drum	\$20000.00
4. Cost of a certified engineer for inspection at closure.	\$500.00
5. Contingency cost for unknown regulatory requirements or cost increases.	\$7600.00
	<hr/>
TOTAL COST	\$31,157.75

EPA I.D. NO. OHD004167219

MINIMUM CLOSURE COST FOR
THE HAZARDOUS WASTE STORAGE AREA

<u>Description</u>	<u>Cost (\$)</u>
1. 1 man-hour to sweep and rinse the storage area X \$11.55/man-hour.	\$11.55
2. Cost of certified engineer for inspection at closure.	\$500.00
	<hr/>
	<hr/>
TOTAL COST	\$511.55

EPA I.D. No. OHD004167219

APPENDIX G

HAZARDOUS WASTE REGULATIONS
CLOSURE AND POST-CLOSURE

CLOSURE PLAN

NATIONAL ELECTRICAL CARBON CORPORATION
(Formerly UNION CARBIDE CORPORATION)

FACILITY: Fostoria

FACILITY DESCRIPTION: National Electrical Carbon Corporation's Fostoria facility manufactures a broad range of carbon and graphite products, including arc carbons, brush blocks, various sizes of rods and pipe, and flexible carbon and graphite cloth. The facility is situated on 71 acres at 41 degrees, 9 minutes longitude and 83 degrees, 24 minutes latitude and currently (2-1-88) employs approximately 217.

ADDRESS: 200 North Town St.
Fostoria, OH 44830

EPA ID NO.: OHD004167219

PREPARED BY: R. M. Wentzel
TELEPHONE NO.: (419) 436-5923

TYPE AND NUMBER OF FACILITIES (Attached diagram showing location of each)

- I. One fenced storage area (25' x 25' = 625 sq. ft.) with a concrete pad. The storage area has a capacity of 200 drums of hazardous waste stacked on pallets (4 drums per pallet). See attached sketch.

2/88 Addendum

One fenced concrete storage pad (25' x 25' = 625 sq. ft.) with dike. The storage facility has a design capacity of 200 drums (55 gallons each) when double stacked on pallets @ four drums per pallet. This unit is secured at all times by a padlock with the key being kept in the possession of the facility's Health, Safety, and Environmental Affairs Department.

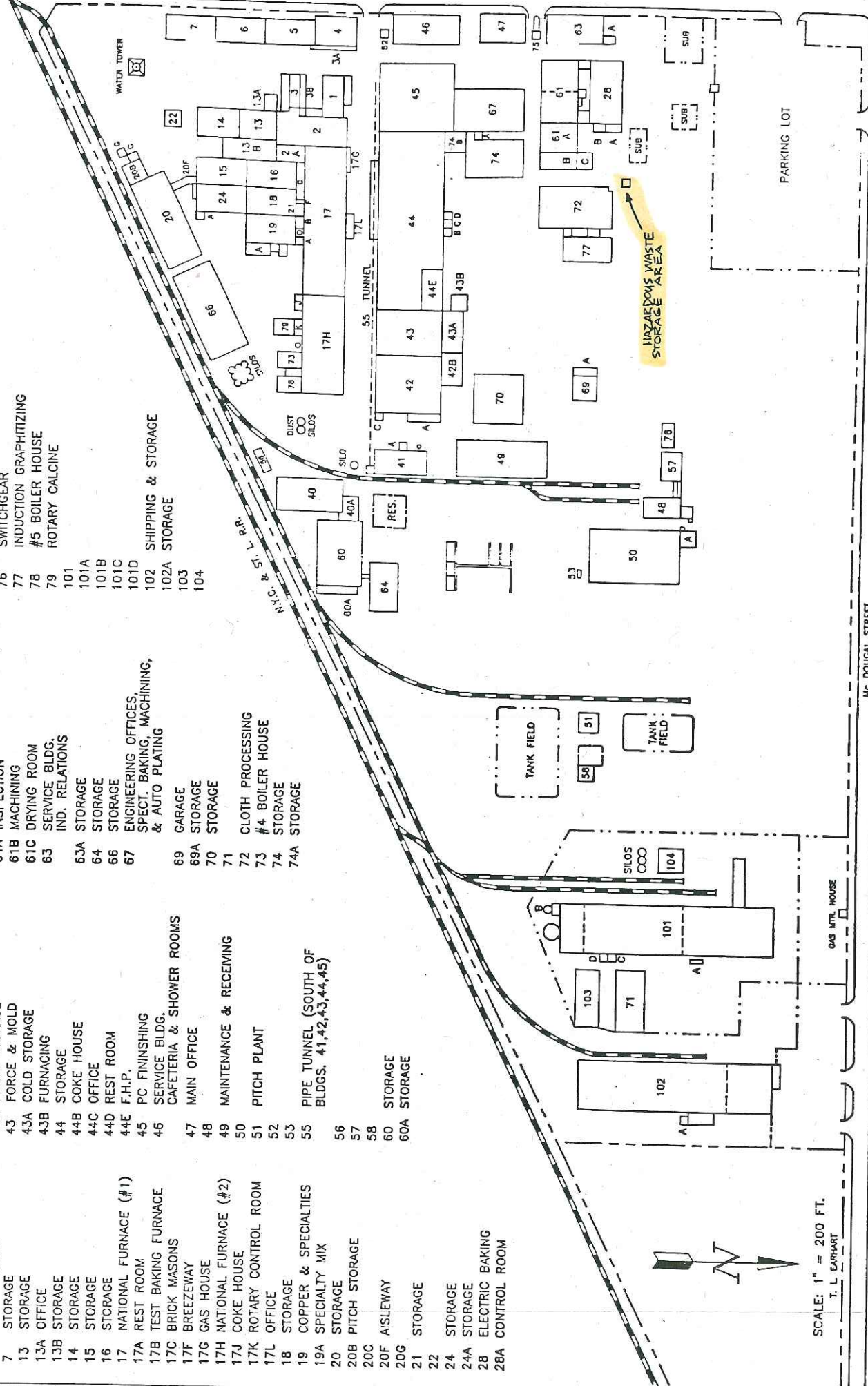
This unit has been utilized solely for less than 90 day accumulation since June, 1987. All waste that had been stored for more than 90 days prior to June, 1987 were contracted for disposal with Rollins Environmental Services, EPA I.D. #LAD010395127 and EnviroSAFE Services of Ohio, EPA I.D. #OHD045243706.

NATIONAL ELECTRICAL CARBON CORP.

200 NORTH TOWN STREET
FOSTORIA, OHIO 44830

- 1 BOX ROOM
- 2 STORAGE
- 3 LOCKER & WASH ROOM
- 3A STORAGE
- 3B AISLEWAY
- 4 CORING
- 5 JAR CASTING
- 5A STORAGE
- 6 TRUCK REPAIR
- 7 STORAGE
- 13 STORAGE
- 13A OFFICE
- 13B STORAGE
- 14 STORAGE
- 15 STORAGE
- 16 STORAGE
- 17 NATIONAL FURNACE (#1)
- 17A REST ROOM
- 17B TEST BAKING FURNACE
- 17C BRICK MASON
- 17F BREEZEWAY
- 17G GAS HOUSE
- 17H NATIONAL FURNACE (#2)
- 17J COKE HOUSE
- 17K ROTARY CONTROL ROOM
- 17L OFFICE
- 18 STORAGE
- 19 COPPER & SPECIALTIES
- 19A SPECIALTY MIX
- 20 STORAGE
- 20B PITCH STORAGE
- 20C
- 20F AISLEWAY
- 20G
- 21 STORAGE
- 22
- 24 STORAGE
- 24A STORAGE
- 28 ELECTRIC BAKING
- 28A CONTROL ROOM
- 28B CONTROL ROOM
- 40 SAGGER MFG.
- 40A SAGGER STORAGE
- 41 PUMP HOUSE
- 41A SWITCHGEAR
- 42 MILL & MIX
- 42A HEAT TREATING
- 42B OFFICE & TRANS. ROOM
- 42C PARTS STORAGE
- 43 FORCE & MOLD
- 43A COLD STORAGE
- 43B FURNACING
- 44 STORAGE
- 44B COKE HOUSE
- 44C OFFICE
- 44D REST ROOM
- 44E F.H.P.
- 45 PC FINISHING
- 46 SERVICE BLDG.
- 47 MAIN OFFICE
- 48
- 49
- 50
- 51 PITCH PLANT
- 52
- 53
- 55 PIPE TUNNEL (SOUTH OF BLDGS. 41, 42, 43, 44, 45)
- 56
- 57
- 58
- 60 STORAGE
- 60A STORAGE
- 61
- 61A
- 61B
- 61C
- 63
- 63A
- 64
- 66
- 67
- 69
- 69A
- 70
- 71
- 72
- 73
- 74
- 74A

- 61 PILOT PLANT & ELECTRIC BAKING
- 61A INSPECTION
- 61B MACHINING
- 61C DRYING ROOM
- 63 SERVICE BLDG. IND. RELATIONS
- 63A STORAGE
- 64 STORAGE
- 66 STORAGE
- 67 ENGINEERING OFFICES, SPECT. BAKING, MACHINING, & AUTO PLATING
- 69 GARAGE
- 69A STORAGE
- 70 STORAGE
- 71
- 72 CLOTH PROCESSING
- 73 #4 BOILER HOUSE
- 74 STORAGE
- 74A STORAGE
- 74B
- 74C
- 74D
- 74E
- 74F
- 74G
- 74H
- 74I
- 74J
- 74K
- 74L
- 74M
- 74N
- 74O
- 74P
- 74Q
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- 74S
- 74T
- 74U
- 74V
- 74W
- 74X
- 74Y
- 74Z
- 75
- 76
- 77
- 78
- 79
- 101
- 101A
- 101B
- 101C
- 101D
- 102 SHIPPING & STORAGE
- 102A STORAGE
- 103
- 104
- 104A
- 104B
- 104C
- 104D
- 104E
- 104F
- 104G
- 104H
- 104I
- 104J
- 104K
- 104L
- 104M
- 104N
- 104O
- 104P
- 104Q
- 104R
- 104S
- 104T
- 104U
- 104V
- 104W
- 104X
- 104Y
- 104Z



SCALE: 1" = 200 FT.

T. L. EAPART

CLOSURE PLAN (Cont.)

A. For Each Activity:

Explain how the listed requirements for specific types of treatment, storage, or disposal (TSD) facilities (e.g., landfill incineration) will be met (refer to Attachment 1); (Add Pages as needed).

1. The fenced concrete pad is used to store hazardous waste material in 55 gallon drums. All drums of hazardous waste material will be disposed of according to Federal EPA Regulations. The storage area will be completely void of waste material. (Note: All liquid Trichloroethylene is reclaimed.)

HAZARDOUS WASTE DISPOSAL (2/88 Addendum)

The closure of this unit will be accomplished within 180 days of the director's approval. Please understand that the facility will continue to utilize this unit for less-than-90 day accumulation. The following schedule will be used to accomplish disposal requirements:

- All hazardous waste that was stored in excess of 90 days was disposed of in June, 1987. This was accomplished just prior to submitting our closure plan. Additionally, Ohio EPA representative Rod Miller was on-site June 10, 1987 for the facility's annual inspection. At the time of inspection, the facility had only four (4) 55 gallon drums of scrap trichloroethylene in storage.
- In reference to the 1988 "phase" of hazardous waste removal, we will coordinate the disposal(s) to be accomplished within forty-five (45) calendar days following closure approval. Since we will continue to generate hazardous waste, it will be difficult to be completely void of all waste, particularly scrap trichloroethylene, our most routinely generated hazardous waste. However, we will make every effort to coordinate our disposal scheduling to minimize the potential quantity. We will notify our Ohio EPA facility inspector five (5) business days prior to initiating disposal activities.
- National Electrical Carbon Corporation will employ the services of T. A. Gleason, Environmental and Geotechnical Services located in Cincinnati, Ohio, Ohio Professional Registration No. E-039800, as its independent registered engineer to certify the critical activities outlined in this section.

CLOSURE PLAN (Cont.)

B. Explain how Section 265.111 Closure Standards will be met.

Standard (a) - Minimize the need for further maintenance:

1. The concrete pad will be thoroughly cleaned and checked to insure that no hazardous waste material is present. The fence and concrete pad will be left on site. See Section E for additional information.

Standard (b) - Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste and constituents, leachate, contaminated rainfall, or waste decomposition products to the groundwater, surface water, or to the atmosphere:

1. The fenced concrete pad will be thoroughly cleaned. The structure will be left on site. See section E for Additional information.

CLOSURE PLAN (Cont.)

- C. Describe how and when the facility will be partially closed, if Applicable, and ultimately closed:

PARTIAL CLOSURE (If Applicable)

<u>Planned Time(s)</u>	<u>How Partially Closed</u>
1. N/A	N/A because the plant operations will continue to generate some hazardous waste that must be stored according to EPA regulations. Therefore, this area will remain operative.

FULL CLOSURE

<u>Planned Time(s)</u>	<u>How Closed</u>
1. N/A	The fenced storage pad will continue to be used. This storage area contains 55 gallon drums of hazardous materials that are placed on pallets. All drums of hazardous material will be disposed of according to Federal EPA Regulations

- D. Section 265.112(a)(2) (pg 33242) - Estimate the maximum inventory of wastes in storage or in treatment at any given time during the life of facility:

MAXIMUM QUANTITY IN STORAGE

<u>EPA WASTE NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY (LB)</u>
F001	Spent Trichloroethylene	15,000
D001	Waste Combustible Liquid (Scrap Furfural)	1,000
D008	Lead Contaminated Carbon Dust	900
D001	Waste Flammable Liquid	1,500
U228	TCE Contaminated Activated Carbon and Gravel	3,600

- E. Section 265.112(a)(3) (Pg 33242) - Describe the steps needed to decontaminate facility equipment during closure:

The storage facility will be thoroughly cleaned by plant personnel and inspected by a certified professional engineer. Steps for decontamination would be as follows:

1. Sweep and rinse (wash if necessary), contain, and sample.
2. Repeat if warranted (pending results of sampling). Based on these procedures and the characteristics and nature of the materials contained in the storage facility, we expect zero contamination.

2/88 Addendum

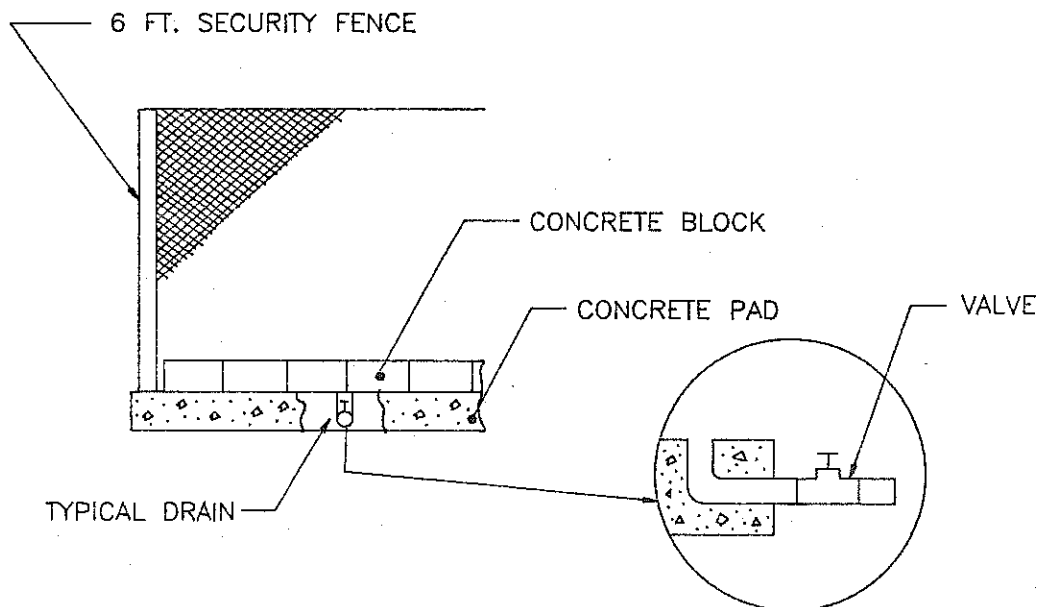
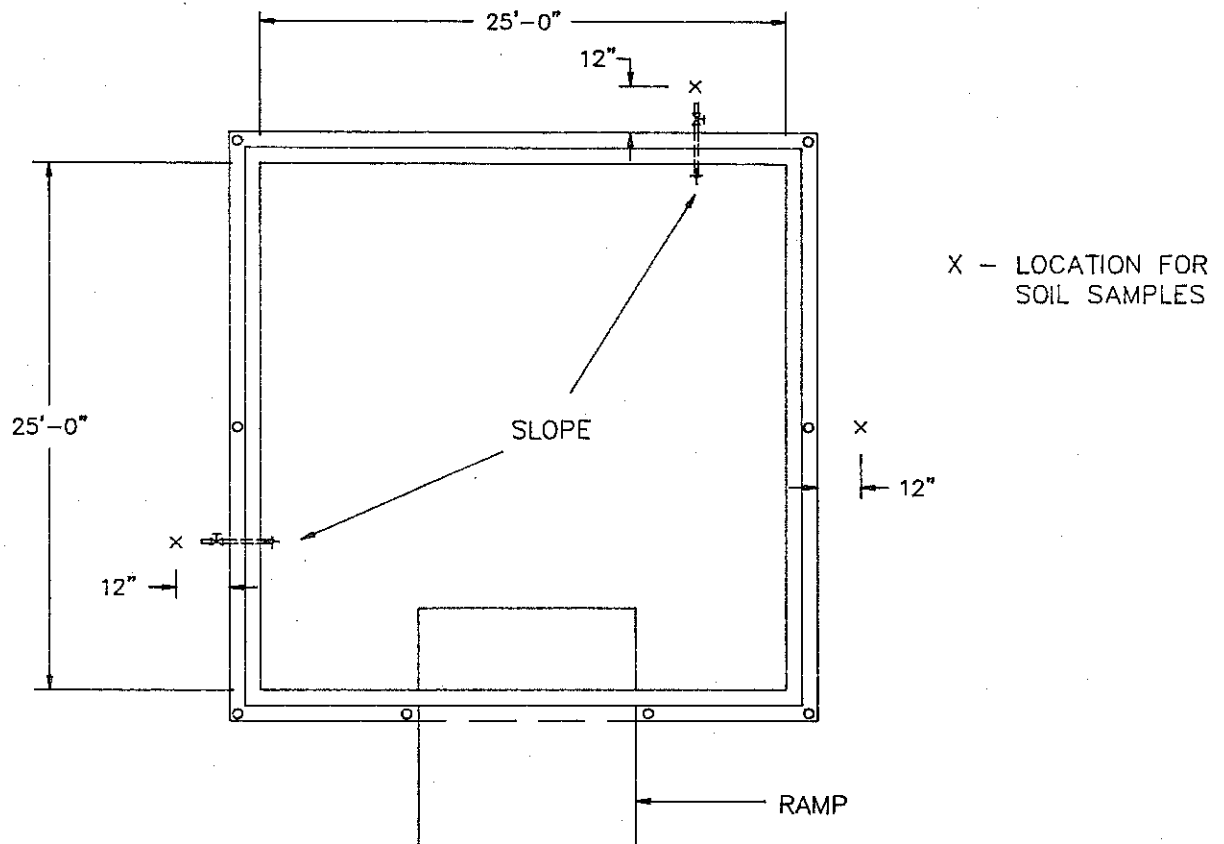
The pad will be cleaned within ten (10) days following removal of hazardous waste. If we incidentally have newly generated scrap trichloroethylene on hand, it may be necessary to move this material to a concrete area adjacent to the fenced pad to complete decontamination and cleaning activities. Water and a biodegradable detergent will be used to clean the pad. The rinseate will be held in the diked pad during cleaning and then pumped into a drums(s) for storage. This procedure will be repeated as necessary to better insure thorough decontamination.

Following the completion of cleaning activities, a sample(s) will be taken from the container(s) and sent to Aqua-Tech Environmental Consultants, Inc. and analyzed for trichloroethylene. The rinseate will be managed as a hazardous waste if the contaminate level exceeds 1 mg/l and would then be properly disposed of within 6-10 weeks pending disposal facility approval/acceptance and scheduling. If the rinseate does not exceed the prescribed contaminant level it would be disposed of via the sanitary sewer system. Concurrent with this decontamination procedure, floor sweepings would be subsequently analyzed and, pending results, managed as a hazardous waste or disposed of via sanitary landfill. Our Ohio EPA facility inspector will be notified five (5) business days prior to our initiating cleaning and decontamination activities.

Furthermore, to ascertain soil contamination around the storage pad, soil samples will be taken at three locations noted on the map, attached and labeled Section E - Appendix I. Initially, samples will be taken at a depth of 0-1 foot with follow-up samples to be taken at 1-2 feet and 2-3 feet if detectable quantities are noted. The soil samples will be analyzed under SW846 - method 8240 for VOCs. The soil surrounding the pad will be considered contaminated and managed as hazardous waste if the results indicate the presence of trichloroethylene at greater than the compounds analytical detection limit. As noted above, soil samples will continue to be collected and analyzed if soil contamination is detected in the first set of samples. Run-off and drain water will be handled in a like manner. This activity will be accomplished concurrently with cleaning, within ten (10) days following hazardous waste removal. Our Ohio EPA facility inspector would be notified five (5) business days prior to initiating this activity.

The storage pad, as noted on the detailed drawing labeled Exhibit A, has two drains (only the north drain is used) that were installed for the purpose of handling rainwater. It has been the practice to drain rainwater onto the ground that has accumulated on the diked pad; however, this is done only after a visual inspection has been conducted to insure that there has not been a leak or spill of the drummed material. This visual inspection is done in addition to the required weekly inspection. As previously noted in this section, the drainwater that has been drained to the north end of the storage area will be sampled and analyzed and managed as a hazardous waste if the contaminant levels are above the prescribed limits.

HAZARDOUS WASTE STORAGE AREA



TLE 2-25-88

NATIONAL ELECTRICAL CARBON CORPORATION
200 NORTH TOWN STREET
FOSTORIA, OHIO 44830

National Electrical Carbon Corporation will employ the services of T. A. Gleason Environmental and Geotechnical Services located in Cincinnati, Ohio as its independent registered engineer to certify the critical activities outlined in this section.

As noted, all rinseate and soil samples will be analyzed by Aqua-Tech Environmental Consultants, Inc. Aqua-Tech has provided our facility with a copy of its QA/QC program (dated July, 1987) and is available for review upon request.

F. Section 265.112(4) (Pg. 33242) - Provide Schedule for Final Closure

ACTION	ANTICIPATED DATE
1. Stop generating and storing hazardous wastes - stop all plant operations.	Unknown
2. Partial Closure (I)	N/A
3. Properly dispose of all hazardous wastes in storage. <u>This must be done within 90 days of the date that the final volume of hazardous waste is placed in the storage area. Section 265.113 (a) (Pg. 33242).</u>	Unknown
4. Complete final closure - <u>This must be done within six months of the date that the final volume of waste is placed in the storage area. Section 265.113(b), (Pg. 33242).</u>	Unknown

MAXIMUM CLOSURE COST FOR
THE HAZARDOUS WASTE STORAGE AREA

ASSUME: A maximum of 200 drums in the storage area. This is the capacity of the storage area.

<u>Description</u>	<u>Cost (\$)</u>
1. 5 man-hours to unload, sweep and rinse the storage area x \$20.00/man hour.	\$100.00
2. Sample and analyze drums for corrosiveness, ignitability, EP toxicity and reactivity.	\$2000.00
3. Transportation and disposal of all drums for closure certification requirements.	\$9000.00
4. Cost of a certified engineer for certification of critical activities.	\$1500.00
5. Contingency cost for unknown regulatory requirements or cost increases.	\$7600.00
TOTAL COST	<u>\$20,200.00</u>

NOTE: The current cost requirements have been greatly reduced due to the amount of waste disposed of in 1987. Since this disposal we have not accumulated any waste stream beyond 90 days, so our quantities have been kept at a minimum thereby reducing disposal costs for "closure."

MINIMUM CLOSURE COST FOR
THE HAZARDOUS WASTE STORAGE AREA

<u>Description</u>	<u>Cost (\$)</u>
1. 5 man-hour to sweep and rinse the storage area x \$20.00/man hour.	\$100.00
2. Cost of certified engineer for inspection at closure.	\$1500.00
TOTAL COST	<u>\$1600.00</u>

~~ALSO SEE OHD 000 821 454~~
HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE

1. The International Insurance Company of Chicago, Illinois hereby certifies that it has issued liability insurance covering bodily injury and property damage to UNION CARBIDE CORPORATION of Chicago, Illinois in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at Carbon Products Division - Town Street, Fostoria, OH 44830 EPA Permit Number OHD-004167219

for non-sudden accidental occurrences.

The limits of liability are \$ 3,000,000. each occurrence and \$ 6,000,000. annual aggregate exclusive of legal defense costs. The coverage provided under policy number 560-000-116 issued on 11/1/82. The effective date of said policy is 11/1/82.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of the insurance, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(j) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

Frank Kinnett

Frank Kinnett
(Authorized Representative)

International Insurance Company
% The London Agency, Inc.

P. O. Box 4985, Atlanta, GA 30302

CERTIFICATE ISSUED TO:

Regional Administrator

EPA Region 5

230 S. Dearborn

Chicago, IL 60604



State of Ohio Environmental Protection Agency

Northwest District Office

347 North Dunbridge Road
Bowling Green, OH 43402-9398

TELE: (419) 352-8461 FAX: (419) 352-8468

Bob Taft, Governor
Christopher Jones, Director

May 21, 2002

Certified Mail 7001 0320 0000 3160 3682

Mr. Dave Curlis
National Specialty Products
200 North Town Street
Fostoria, Ohio 44830

RECEIVED
SEP 20 2002

RCRA RECORDS ROOM
Waste, Pesticides & Toxics Division
U. S. EPA - REGION 5

Re: **Notice of Deficiency**
Amended Post-Closure Plan (GPRA Baseline)
National Specialty Products
OHD 004 167 219

Dear Mr. Curlis:

On July 19, 2001, Ohio EPA received from National Specialty Products (NSP) an amended post-closure plan for the former drum holding area located at 200 North Town Street, Fostoria, Ohio. The document is entitled *Amended Closure Plan for the Former Drum Holding Area at National Specialty Products* and was prepared by Bennett & Williams Environmental Consultants, Inc.

Ohio EPA's Division of Hazardous Waste Management (DHWM) and Division of Drinking and Ground Waters (DDAGW) have conducted a review of the above referenced post-closure plan, and determined it to be deficient.

I have enclosed, as an attachment to this correspondence, detailed deficiency comments on the post-closure plan. Please provide a revised post-closure plan addressing all areas indicated in the deficiency comments. Ohio Administrative Code (OAC) Rule 3745-66-18 requires that such a revised amended post-closure plan be submitted to the director of Ohio EPA for approval within thirty (30) days of the receipt of this letter.

The revised amended post-closure plan shall be prepared in accordance with the following editorial protocol or convention:

1. Old Language is over-struck, but not obliterated.
2. New Language is capitalized.
3. Page headers should indicate date of submission.
4. If significant changes are necessary, pages should be re-numbered, table of contents revised, and complete sections provided as required.

The revised amended post-closure plan should be submitted to: Ms. Pamela Allen, Manager, Division of Hazardous Waste Management, Information Technologies and Technical Support Section, P. O. Box 1049, Columbus, Ohio 43216-1049. A copy should also be sent to: Ms. Lynn Ackerson, Ohio EPA, Northwest District Office, Division of Hazardous Waste Management, 347 North Dunbridge Road, Bowling Green, Ohio 43402.



Mr. Dave Curlis
May 21, 2002
Page Two

Ohio EPA will, pursuant to OAC Rule 3745-66-18, review the re-submitted plan and issue a final action approving or modifying the plan. Ohio EPA's final action on the re-submitted plan is appealable to the Environmental Review Appeals Commission.

If you wish to arrange a meeting to discuss your responses to this Notice of Deficiency, please contact Lynn Ackerson at (419)373-4113.

Ohio EPA, DHWM, strongly encourages you to consider pollution prevention options for any processes at your facility that generate waste. While implementation of pollution prevention options is not required by Ohio laws and regulations, the application of waste minimization practices may help reduce the expense of remedial activities. Additionally, implementation of pollution prevention options may prevent the creation of new units and, as a result, eliminate the requirement to submit a closure plan in the future. For assistance in identifying and implementing pollution prevention options, contact Colleen Weaver at (419)373-3059.

Sincerely,



Michael Terpinski
Supervisor
Division of Hazardous Waste Management

LMA/cs

Attachment

pc: Pamela Allen, DHWM, ITTS, CO
Thomas Matheson, U.S. EPA, Region V
Ed Lim, Manager, Engineering & Risk Assessment Section, DHWM, CO
Lynn Ackerson, DHWM, NWDO
George Stuckey, DDAGW, NWDO

ec: Jennifer Rockhold, Engineering & Risk Assessment Section, DHWM, CO

Attachment 1: DDAGW and DHWM Comments on the document entitled *Amended Closure Plan for the Former Drum Holding Area at National Specialty Products* dated July 20, 2001

Subsection 1.1.1, page 3: Description of Former Drum Holding Area.

1. National Specialty Products must include the waste code D040 for spent trichloroethylene (TCE).
2. The TCE spill occurred in 1985. The date in the text must be changed.

Subsection 3.2, page 9: Recovery and Treatment System.

3. The TCE spill occurred in 1985. The date in the text must be changed.

Subsection 4.1, page 12: Initial Ground Water Monitoring.

4. The last sentence on page 12 states " Water levels at the former drum holding area will be measured twice a week until it is apparent that the natural gradient has been reestablished." It is likely that the natural gradients would return. However, NSP should provide an optional plan that would address representative ground water monitoring in the event that natural gradients do not return.
5. The second paragraph (top of page 13) should be revised to indicate that the initial sampling will not be performed for at least four weeks after the pumping from the recovery well has ceased. This will ensure that representative samples can be withdrawn from the monitoring wells.

Subsection 4.2, page 13: Closure Options

6. The third sentence (paraphrased) states " The second optionbelow the **site action levels** or MCLssubsequent sampling events." Site action levels should be determined. It is understood that the compound 1,1 dichloroethane does not have an established maximum contaminant level (MCL) and that a generic site action level should be developed. Action levels can be determined by performing additive risk analysis after each sampling event. This number would then be used with the other compounds' MCLs to determine if corrective action is necessary. An additive risk scenario would be used to determine if risk-based clean closure is viable.

Sub-subsection 4.2.2, page 14: Risk Based Clean Closure

7. It is recommended that this sub-subsection be revised to incorporate the following risk based clean closure language:

If analytical results of the compliance ground water monitoring program under OAC Rules 3745-54-90 through 3745-54-99 indicate concentrations above the analytical method detection limit for non-naturally occurring hazardous waste constituents, NSP must determine the rate and extent of ground water contamination in accordance with OAC Rule 3745-54-91(A)(3). Rate and extent may need to be determined again since re-establishment of the natural gradient may have altered the plume geometry. The risk-based clean closure standard must be met throughout the plume and not just at the compliance point or downgradient facility boundary.

In addition, the risk assessment (including additive risk) must consider all hazardous waste constituents identified in the ground water and must be calculated on a total cancer risk level of 1×10^{-5} and a total hazard index (non-carcinogenic) level of 1 for all affected and potentially affected environmental media (soil, ground water, surface water, and air) and exposure pathways (ingestion, inhalation, and dermal contact). The "clean" closure risk assessment scenario (the ground water pathway is one component of the entire risk assessment demonstration) assumes an unlimited residential use and must consider consumption and use of ground water in adults as well as children.

For risk-based closure for non-naturally occurring constituents, at least twelve (12) ground water data points must be collected, preferably over a one-year period. If, as it has been shown historically, only one monitoring well at NSP displays any concentration of a non-naturally occurring constituent, then the highest concentration of any constituent in the well must be used when the risk assessment demonstration is performed. Resampling is permitted under OAC Rule 3745-54-99(G) and the resampling protocols included in Section 5 – Statistical Analyses can be included in this section. After twelve data points have been collected, risk is calculated and if all results for the last four sampling events for the well are below the risk-based limit (and the MCL) then risk shall have been met and ground water monitoring will no longer be required.

8. NSP may use ground water sampling data as part of their risk-based closure demonstration for risk-based closure certification if the following criteria are met:
 - a. NSP has completed at least twelve events of ground water monitoring over a one-year period.
 - b. These sampling events are concurrent and within the past calendar year.
 - c. The ground water monitoring has been conducted in compliance with the sampling schedule and parameter list required by either the regulations (OAC Rules 3745-54-90 through 99) or the approved closure plan.
 - d. Ground water concentration values are documented to be below health based risk assessment standards.

9. NSP may submit a closure certification in accordance with OAC Rule 3745-55-15 and ground water monitoring shall no longer be required. A statement must be included that the wells will be properly abandoned in accordance with State of Ohio Technical Guidance for Sealing Unused Wells (State Coordinating Committee on Ground Water. *Technical Guidance for Sealing Unused Wells* <http://www.epa.state.oh.us/ddagw/wellsealguid.pdf>1996).

Section 5, page 16: Statistical Analyses

10. This section of the Closure Plan can be eliminated. Statistical analysis of the concentrations of non-naturally occurring volatile organic compounds (VOCs), by use of direct comparison, is a moot exercise. Once the additive risk assessment has been performed, (additive risk includes all site specific VOCs and their daughter products) and if it is displayed that the concentrations of the VOCs and their daughter products have met risk, then no further ground water monitoring shall be required. Resampling language should be moved to Subsection 4.2.2 as stated in comment five above.

Appendix B: Post-Closure Sampling and Analysis Plan

11. Subsection 1.2 – Decontamination and Storage of Clean Equipment (page 3) and Section 3.0 – Step by Step Sampling Procedures, page 8: Item six in Section 3.0 states that total depths of the monitoring wells will be measured and recorded to determine purging volumes and if siltation has occurred in the wells. Item seven in Section 3.0 and the decontamination language in Subsection 1.2 should be revised to include washing with Alconox® detergent and successive rinses with distilled water.
12. Subsection 1.3 – Purging and Sampling, page 3: Revise the last sentence of the second paragraph of Subsection 1.3 which states in part, “... the use of proper sampling techniques, and eliminating, when possible, all bubbles and headspace within the VOA vials.” No bubbles or headspace should be present in the VOC sample vials. Air bubbles and a headspace will jeopardize the analysis of the VOC samples.
13. Section 3.0 – Step by Step Sampling Procedures, number 16, page 10: This section should be revised to include the provision that no bubbles or headspace should be present in the VOC sample vials. Air bubbles and a headspace will, of course, jeopardize the analysis of the VOC samples. Air bubbles and a headspace will jeopardize the analysis of the VOC samples.

General Comment:

14. In accordance with OAC 3745-57-10(B), the amended post-closure plan should include a description of how NSP will maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events; and prevent run-on and run-off from eroding or otherwise damaging the final cover.

**C.2 Compliance
And Enforcement**

C.2 Compliance And Enforcement



State of Ohio Environmental Protection Agency

Northwest District Office

347 North Dunbridge Road
P.O. Box 466
Bowling Green, Ohio 43402-0466
(419) 352-8461 FAX (419) 352-8468

RECEIVED
OHIO EPA

SMEL
HNSP
TCLP

AUG 6 1991

RECEIVED

DIV. OF SOLID & HAZ. WASTE MGT.

George V. Voinovich
Governor

AUG 28 1991

OFFICE OF RCRA Re:
Waste Management Division
U.S. EPA, REGION V

Inspection of Facility
OHD 004 167 219
Hazardous Waste
Seneca County

August 5, 1991

Mr. Mike Wentzel
National Electrical Carbon Corporation
200 North Town Street
Fostoria, Ohio 44830

RECEIVED
WMD RECORD CENTER

JUL 14 1994

Dear Mr. Wentzel:

On July 25, 1991, the Ohio Environmental Protection Agency conducted a hazardous waste compliance evaluation inspection of National Electrical Carbon Corporation located in Fostoria, Ohio. This inspection was conducted in order to determine National Electrical Carbon Corporation's compliance with Ohio's generator and disposal regulations as adopted under Chapter 3745 of the Ohio Administrative Code (OAC). National Electrical Carbon Corporation was represented by yourself. The Ohio EPA was represented by Phil Willaims and Brent Kuenzli. The Agency's inspection included a tour of your facility and a review of written documentation. National Electrical Carbon Corporation is a manufacturer of a broad range of carbon and graphite products including rods, pipe, felt, cloth, porous carbon and carbon particles. Hazardous wastes generated at this site include waste trichloroethylene, miscellaneous lab solvents, and lead contaminated carbon dust.

During the inspection, the following violations of Ohio's hazardous waste rules were observed and noted:

1. OAC 3745-65-15 (B) (1) The owner or operator shall develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment including, but not limited to, dikes and sump pumps that are necessary for preventing, detecting, or responding to environmental or health hazards. The National Electrical Carbon Corporation does not keep a written schedule or log record of dates and time periods between inspections. (2) The owner or operator shall keep this schedule at the facility. The National Electrical Carbon Corporation does not keep an inspection schedule at the facility. (3) The schedule

Mr. Mike Wentzel
August 5, 1991
Page Two

shall identify the types of problems including, but not limited to, malfunctions or deterioration which are to be looked for during the inspection. The National Electrical Carbon Corporation does not have a written schedule identifying problems to look for during an inspection.

(4) The frequency of inspection may vary for items on the schedule. However, the inspection will be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spill, such as loading and unloading areas, shall be inspected daily when in use. At a minimum, the inspection shall include the items and frequencies set forth in rules 3745-66-74, 3745-66-93, 3745-67-95, 3745-67-26, 3745-68-47, 3745-68-77, and 3745-69-03 of the Ohio Administrative Codes.

2. OAC 3745-65-54 The contingency plan shall be reviewed and immediately amended, if necessary, whenever: (A) applicable rules are revised; (B) the contingency plan fails in an emergency; (C) the facility changes -- in its design, construction, operation, maintenance, or other circumstances -- in a way that materially increases the potential for fire, explosions, or release of hazardous waste constituents, or changes the responses necessary in an emergency; (D) the emergency coordinator changes; (E) the list of emergency equipment changes; or, (F) as required by the Director of the Ohio EPA. National Electrical Carbon Corporation needs to revise the facility's contingency plan to meet the requirements of the above rule.
3. OAC 3745-65-53 (A) (B) A copy of the contingency plan and all revisions to the plan shall be: (A) maintained at the facility; and, (B) submitted to all local police departments, fire departments, and hospitals, as well as the Ohio EPA and local emergency response teams, and any other emergency service authority who may be requested to provide emergency services. The National Electrical Carbon Corporation does not have a revised contingency plan at the facility nor has a revised plan been submitted to the proper authorities.

4. OAC 3745-65-16 (D) (E) The owner or operator shall maintain the following documents and records at the facility: (1) The job title for each position at the facility related to hazardous waste management. (2) A written job description for each of these positions. These descriptions may be consistent in their degree of specificity with descriptions for other similar positions in the same company, location or bargaining unit, but shall include the required skill, education or other qualifications required to do the job, and duties of facility personnel assigned to each position. (3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed above; and, (4) records that document the training or experience which is required or has been given to, and completed by, facility personnel. (E) Training records on current personnel shall be kept until closure of the facility. Personnel training records may accompany personnel transferred within the same company. National Electrical Carbon Corporation does not keep written records of personnel training, job titles, or job descriptions of personnel who participate in hazardous waste management activities at the facility.
5. OAC 3745-65-33 (A) (B) All facility communication or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, shall be tested on a weekly basis and maintained as necessary to assure its proper operation in the event of an emergency. (B) The owner or operator shall record the weekly tests in a log or summary. He shall keep these records for at least three years from the date of the test. At a minimum, these records shall include the date and time of the test, the name of the person performing the test, a notation of the observations made, and the date and nature of any repairs or other remedial actions required. The National Electrical Carbon Corporation does not perform weekly tests of the equipment mentioned above.
6. OAC 3745-65-34 Whenever hazardous waste is being handled, all personnel involved in the operation shall have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee. The National Electrical Carbon Corporation does not provide means of emergency communication in the hazardous waste storage building.

Mr. Mike Wentzel
August 5, 1991
Page Four

7. OAC 3745-65-17 (A) The owner or operator shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction including, but not limited to: friction heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive wastes are being handled, the owner or operator shall confine smoking and open flames to specially designed locations. "No Smoking" signs shall be conspicuously placed wherever there is a hazardous form of ignitable or reactive waste. The National Electrical Carbon Corporation does not have "No Smoking" signs placed in or outside the hazardous waste storage building.

In addition to the above noted violations, the Ohio EPA offers the following suggestions for improved record keeping:

1. Obtain copies of the land disposal restrictions (LDR's) forms that are missing from National Electrical Carbon Corporation's 1991 manifest file. The TSD facilities that handled the hazardous waste that was generated should have copies of the LDR forms in their manifest file. Once the missing LDR's are obtained by National Electrical Carbon Corporation, send a letter of notification to Phil Willaims of the Ohio EPA, Northwest District Office, Division of Solid and Hazardous Waste Management.
2. The contingency plan may be incorporated into the facility's manual but must be a stand-alone portion of the manual that is clearly labeled and can be accessed immediately in the event of an emergency.

Please be advised that failure to comply with applicable hazardous waste rules may be cause for enforcement action by this Agency pursuant to Chapter 3734 of the Ohio Revised Code. Please respond, in writing, to this Notice of Violation (NOV) within ten (10) days. Your response must include all actions and timetables necessary to demonstrate compliance.

Failure to list specific deficiencies in this communication does not relieve you from the responsibility of complying with all applicable regulations.

Mr. Mike Wentzel
August 5, 1991
Page Five

A copy of the completed inspection form is enclosed for your review. If you have any questions, please advise.

Sincerely,



Brent Kuenzli
Division of Solid and
Hazardous Waste Management

/mtt

Enclosures

pc: • Laurie Stevenson, DSHWM, CO
Cindy Lohrbach, DSHWM, NWDO
NWDO file
A & C Representative

**RCRA HAZARDOUS WASTE GENERATOR
COMPLIANCE EVALUATION INSPECTION CHECKLIST**

Facility: NATIONAL Electronic Carbon Corp
USEPA I.D.: QHD 004167219 HWFB No.: _____
Street: 200 N. Town Street
City: Fostoria State: O Zip: 44830
County: Seneca Telephone: 419 436-5923
Owner/Operator: MORGAN Crucible Co. Plc.
Street: Chariott House Co-12 Victoria Street
City: Windsor Berkshire UK State: _____ Zip: SL41EP
Telephone: 011-44-753-850-331

Inspection Date: 7/25/91 Time: 9:30 - _____

Advance notice of inspection given? (yes) X (no) _____
If so, how far in advance? 1 week

	<u>Name</u>	<u>Agency/Title</u>	<u>Phone</u>
Inspectors:	<u>Phil Williams</u>	<u>OEPA</u>	_____
	<u>Brent Kuenzli</u>	_____	_____
Facility Representative:	<u>Mike Wentzel</u>	_____	_____

STATUS

Cond. Exempt SQG _____ SQG _____ Large Quantity Generator X
LDR Checklist Attached: (yes) X (no) _____

ACTIVITIES

Containers <u>X</u>	Used oil burner _____
Tanks _____	Hazardous waste fuel burner/blender _____
Wastepile _____	Incineration/Thermal treatment _____
Landfill _____	Land treatment _____
Surface Impoundment _____	Groundwater monitoring _____

Revised: 1/7/91

REMARKS - GENERAL INFORMATION

Include list of wastes being generated/managed at the site and a brief description of site activity and waste handling procedures:

DESCRIPTION OF WASTE	ON SITE MANAGEMENT	OFF SITE MANAGEMENT
1. Solid waste	1.1. Solid waste	1.1. Solid waste
2. Liquid waste	2.1. Liquid waste	2.1. Liquid waste
3. Gaseous waste	3.1. Gaseous waste	3.1. Gaseous waste
4. Hazardous waste	4.1. Hazardous waste	4.1. Hazardous waste
5. Radioactive waste	5.1. Radioactive waste	5.1. Radioactive waste
6. Other waste	6.1. Other waste	6.1. Other waste

[illegible]

SPECIAL REQUIREMENTS FOR IGNITABLE/REACTIVE/INCOMPATIBLE
WASTES (OAC 3745-65-17)

Y/N/NA RMK #

1. If ignitable, reactive or incompatible wastes are handled,
does the facility meet the following requirements?
[3745-65-17]

a. Wastes are protected from sources of ignition and/or
reaction?

Y _____

b. Physical separation of incompatible waste materials?

N/A _____

c. "No Smoking" or "No Open Flames" signs are placed
near areas where ignitable or reactive wastes are
handled?

N 1

d. Commingling of waste materials is done in a controlled,
safe manner as prescribed by 3745-65-17(B)?

Y _____

REMARKS - IGNITABLE/REACTIVE/INCOMPATIBLE WASTE REQUIREMENTS

1. No signs in or outside of hazardous storage.

Co-mingling of F003, F005, D040



NATIONAL ELECTRICAL CARBON CORPORATION

200 NORTH TOWN STREET, FOSTORIA, OHIO 44830

September 27, 1988

Valdas V. Adamkus
USEPA
230 South Dearborn St.
Chicago, IL 60604

Dear Mr. Adamkus:

This letter is in response to the August 17, 1988 decision regarding the "demonstration" requirements of 40 CFR 268.8 associated with the landfilling of "soft hammer" wastes. National Electrical Carbon Corporation has sought alternatives to landfilling our EPA Waste No. U228 (a solid waste generated by a groundwater filtering system and consisting of activated carbon and gravel which is contaminated with trichloroethylene at a level less than 1% by total weight). However, due to the unavailability of reclamation services, higher incineration costs, and reasons further explained below, landfilling this particular waste remains the most practical and feasible disposal alternative.

The following information summarizes our efforts and further explains our position regarding landfilling this waste:

1.) Currently the landfill cost for disposal of this waste is approximately \$60.00 per drum representing a best case ratio of 4:1. The following companies were contacted for incineration services:

- SCA Incineration
Chicago, IL 60607
(312) 646-5700
Cost: 1.25/lb. plus \$3.90 per loaded mile
- Trade Waste Incineration
No. 7 Mobile Ave.
Sauget, IL 62201
(618) 271-2804
Cost: \$515/55 gal. drum plus 20% transportation charge
- Tricil
Corunna, Ont
(519) 332-0720
Incineration capability for liquids only
- Ashland Chemical Co.
200 Darrow Road
Akron, OH 44305
Cost: \$254/55 gal. drum
- Ross Incineration
394 Giles Road
Grafton, OH 44044
(216) 748-2171
Cost: \$1000 Min. Charge or \$250/gal. drum

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OCT 17 1988

U. S. EPA REGION 5
OFFICE OF REGIONAL ADMINISTRATOR

2.) The following companies were contacted for reclamation services but they did not have the capability and/or the appropriate permit to do such:

- North American Carbon
423 McCormick Blvd.
Columbus, OH 43316
(614) 864-8100
- Barneby Chaney Co.
835 North Cassidy
Columbus, OH 43216
- Sorb-Tech
P.O. Box 7921
The Woodlands, TX 77387
(216) 243-6918 (Regional Affiliation)

3.) We have initiated closure proceedings for our interim status permitted storage pad and to seek acceptance of this waste at another facility is very time consuming. Doing so would cause delays in the time table to which we have agreed in our closure plan.

4.) We have plans currently underway to implement waste minimization practices by making a process change that will eliminate the generation of this particular waste. The activated carbon filtration unit is scheduled to be replaced by an air stripper by the end of 1988.

In addition to this letter of demonstration, please find attached the certification statement as required by 40 CFR 268.8 (a)(2)(i). Please feel free to contact me at (419) 436-5923 if there are any questions or comments.

Sincerely,



R. Michael Wentzel
Manager-Health, Safety,
and Environmental Affairs

RMW:smg

CC: Peggy Brannigan, Ohio EPA
Envirosafe Services of Ohio, Inc.

Universal RCRA Land Disposal Prohibition Notification and Certification Statement

GENERATOR NAME National Electrical Carbon PCN 1532A
USEPA I.D. NO. OHD004167219 MDOC. NO. 00104
WASTE DESCRIPTION Hazardous Waste Solid, NOS EPA CODES U228

1. ☐ This waste is exempt from land disposal restrictions per 40 CFR 268.30 (a)(3) until November 8, 1988.
[Less than 1 % F001-F005 solvent exemption; Notification required by 40 CFR 268.7(a)(1)]
2. ☐ This waste is exempt from land disposal restrictions per 40 CFR 268.32 (e) until July 8, 1989.
[HOC Solids greater than 1000 mg/Kg, HOC Liquids greater than 10,000 mg/L; 40 CFR 268.7(a)(1)]
3. ☐ This waste is exempt from land disposal restrictions per 40 CFR 268.1 (c)(3), 268.30 (a)(2) or 268.32 (d) until November 8, 1988. [RCRA/CERCLA corrective action exemption; 40 CFR 268.7(a)(1)]
4. ☐ This waste is exempt from land disposal restrictions per 40 CFR 268.30 (a)(1) until November 8, 1988.
[100-1000 kg per month small quantity generator; Notification required by 40 CFR 268.7(a)(1)]
5. ☐ This waste is exempt from land disposal restrictions per 40 CFR 268.1 (c)(1), 268.1 (c)(2) or 268.1 (c)(4).
[< 100 kg per month small quantity generator, 268.5 Extension or 268.6 Petition; 40 CFR 268.7(a)(1)]
6. ☐ This waste is exempt from land disposal restrictions per 40 CFR 268.33 (b) until August 8, 1990.
[K048-52, K071 codes with 2 year variance from treat stds.; Notification required by 40 CFR 268.7(a)(1)]
7. ☐ This waste is exempt from land disposal restrictions per 40 CFR 268.33 (c) until August 8, 1990.
[Contaminated Soil & Debris with BDAT of Incineration; Notification required by 40 CFR 268.7(a)(1)]
8. ☐ I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment. [Meets current California standards without additional treatment, i.e. does not now meet California list definition in current state; 40 CFR 268.7(a)(2)]
☐ Non-liquid per Paint Filter Test ☐ pH greater than 2.0 S. U. ☐ HOC's less than specified limits
☐ Metals less than specified limits ☐ Cyanide less than sp. limits ☐ PCB's less than specified limits
9. ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated properly so as to comply with the performance levels specified in 40 CFR Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d) without dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment. [Meets applicable treatment concentration standards; TCLP or other; Notification required by 40 CFR 268.7(b)(2)(i)]
10. ☐ I certify under penalty of law that the waste has been treated in accordance with 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment. [Has been treated using the required treatment technology; 40 CFR 268.7(b)(2)(ii)]
11. ☒ I certify under penalty of law that the requirements of 40 CFR 268.8(a)(1) have been met and that disposal in a landfill or surface impoundment is the only practical alternative to treatment currently available. I believe that the information submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.
[Certification for land disp. of "Soft Hammer" wastes in 40 CFR 268.10; req'd by 40 CFR 268.8(a)(2)(i).]
12. ☐ I certify under penalty of law that the requirements of 40 CFR 268.8(a)(1) have been met and that I have contracted to treat my waste (or will otherwise provide treatment) by the practically available technology which yields the greatest environmental benefit, as indicated in my demonstration. I believe that the information submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [Certification of environmental benefit for "Soft Hammer" wastes in 40 CFR 268.10; required by 40 CFR 268.8(a)(2)(ii).]
13. ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated properly so as to comply with treatment as specified in the generator's demonstration. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [Certification that "Soft Hammer" waste in 40 CFR 268.10 was treated in accordance with generator's Demonstration; required by 40 CFR 268.8(c)(1).]
14. ☐ This waste is exempt from land disposal restrictions per 40 CFR 268.12 until May 8, 1990. [Leachate, etc.]

Signature



Date October 5, 1988



UNION CARBIDE CORPORATION
Electronics Division

200 NORTH TOWN STREET, FOSTORIA, OHIO 44830

November 3, 1986

OH D004167219

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NOV 05 1986

U.S. EPA, REGION V

Mr. David A. Stringham
RCRA Activities
Region V
P.O. Box A 3587
Attn: ATKJC
Chicago, IL 60690

Dear Mr. Stringham:

Attached is a copy of page 6 of the "1986 National Screening Survey of Hazardous Waste Treatment, Storage, Disposal, and Recycling Facilities" submitted in March of 1986. In reviewing, incorrect responses were noted in the "Storage Operations" section and in Section "a". In both sections, the incorrect responses have been marked over with an "X" and the correct responses have been circled and highlighted in yellow. Please replace the original page 6 that was submitted in March with this revised sheet.

Sincerely,

R. M. Wentzel
Administrator, H.S.E.A.

RMW:nko

cc: T. E. Graves

5. Indicate the types of hazardous waste treatment, storage, disposal, and recycling units that are onsite at this facility and the types of hazardous waste that can be treated, stored, disposed, or recycled with each

- Circle codes 01 through 08 in the first row (a) of the matrix to indicate the types of hazardous waste that cannot be treated, stored, disposed, or recycled in any type of unit onsite at this facility.
- Opposite each type of hazardous waste unit listed down the left-hand side of the matrix (rows b through q), circle codes 01 through 08 to indicate the types of hazardous waste that can be treated, stored, disposed, or recycled in each type of unit that is onsite, that has a permit or interim status (where necessary), and that is operational at this facility.
- For each type of unit, circle 09 if there is no unit onsite at this facility, if it is not permitted or interim status (where necessary), or if it is not operational.
- Circle either 10 (YES) or 11 (NO) for each type of onsite unit to indicate whether or not this facility's units are "commercially available."

NOTE: See the definition of "commercially available" on page 2. In addition, "operational" units should include those that are temporarily not operational due to repairs, maintenance, or low demand.

Type of hazardous waste unit	Which of the following types of RCRA-hazardous waste currently are treated, stored, disposed, or recycled onsite at this facility using each type of hazardous waste unit?* (Circle all that apply.)								No units of this type onsite	Are onsite units of this type commercially available?	
	Acidic corrosives (pH < 2)	Metals	Cyanides	Solvents	PCBs	Dioxins	Other halo-genated organics	Other hazardous waste		Yes	No
a. No waste of this type can be treated, stored, disposed, or recycled at this facility	01	02	03	04	05	06	07	08			
Treatment Operations											
b. Liquids incineration	01	02	03	04	05	06	07	08	09	10	11
c. Solids incineration	01	02	03	04	05	06	07	08	09	10	11
d. Wastewater treatment†											
i. Biological treatment	01	02	03	04	05	06	07	08	09	10	11
ii. Steam stripping§	01	02	03	04	05	06	07	08	09	10	11
iii. Other	01	02	03	04	05	06	07	08	09	10	11
e. Solidification**	01	02	03	04	05	06	07	08	09	10	11
f. Treatment impoundment	01	02	03	04	05	06	07	08	09	10	11
g. Other treatment†	01	02	03	04	05	06	07	08	09	10	11
Storage Operations											
h. Storage impoundment	01	02	03	04	05	06	07	08	09	10	11
i. Waste pile	01	02	03	04	05	06	07	08	09	10	11
j. Other storage	01	02	03	04	05	06	07	08	09	10	11
Disposal Operations											
k. Underground injection	01	02	03	04	05	06	07	08	09	10	11
l. Disposal impoundment	01	02	03	04	05	06	07	08	09	10	11
m. Landfill	01	02	03	04	05	06	07	08	09	10	11
n. Land treatment	01	02	03	04	05	06	07	08	09	10	11
Recycling Operations											
o. Solvent recovery§§	01	02	03	04	05	06	07	08	09	10	11
p. Reuse as fuel	01	02	03	04	05	06	07	08	09	10	11
q. Other recycling	01	02	03	04	05	06	07	08	09	10	11

* These compounds exist in most wastes at very low concentrations. Provide information on them based on what each treatment, storage, disposal, and recycling unit onsite at this facility is "typically" designed to take.

† If this facility's wastewater treatment system includes a treatment impoundment, also circle all the applicable codes opposite "treatment impoundment."

§ For this survey, "steam stripping" as a treatment operation is the removal of organic contaminants from a waste using direct or indirect contact steam for the primary purpose of complying with publicly owned treatment works (POTW) or National Pollutant Discharge Elimination System (NPDES) wastewater discharge limitations.

** For this survey, "solidification" includes units sometimes referred to as "fixation" or "stabilization" units.

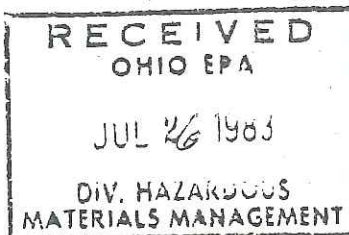
If the "other treatment" occurs in a treatment impoundment, also circle all the applicable codes opposite "treatment impoundment."

§§ For this survey, "solvent recovery" is the removal of organic constituents from waste for the primary purpose of recovering the organic compound for reuse. As defined here, "solvent recovery" includes units that are sometimes referred to as "batch distillation" or "fractionation" units. Steam stripping is sometimes used for solvent recovery and should be noted separately from steam stripping as a treatment operation.

P status
Ohio EPA

Re: Seneca County
Hazardous Materials
Union Carbide Corporation
HWFAB #03-74-0385

G/TSD



Mr. Bill Glasgow
Assistant Plant Manager
Union Carbide Corporation
P. O. Box J
Fostoria, OH 44830

July 25, 1983

OHIO 004 167 219

Dear Mr. Glasgow:

On July 12, 1983, I conducted a RCRA Interim Status Standards inspection of your facility which was represented by Carl Reiter, Gary Niedenthal and you. The facility was found to be in compliance with all applicable State and Federal regulations.

You are hereby advised that total compliance with the regulations contained in 40 CFR 265 is required as a condition of continuing interim status with the U.S. EPA. Failure to list specific deficiencies in this communication does not relieve you from the responsibility of complying with all applicable regulations.

A copy of the form completed during the inspection is enclosed. If you have any questions about the inspection, please call me at 352-8614.

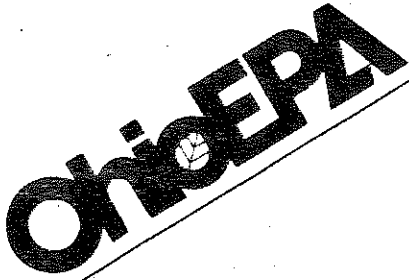
Sincerely,

Bennett A. Chambers for
Janet W. Badden
Hazardous Waste Scientist

JWB/kb

Enclosure

cc: Ken Westlake, U.S. EPA, Region V w/encl.
cc: Paula Cotter, DHMM, CO w/encl. ✓



Re: Seneca County
Hazardous Materials
Union Carbide Corporation,
Carbon Products Division
HWFAB #03-74-385

Vincent Passaro
Environmental Coordinator
Union Carbide Corporation
Carbon Products Division
P. O. Box J
Fostoria, OH 44830

September 7, 1982

Dear Mr. Passaro:

On August 26, 1982, I conducted a RCRA Interim Status Standards inspection of your facility which was represented by you. At that time the following deficiencies were noted, as referenced by the enclosed inspection form:

Page 4-2, 5

No documentation of annual training program refresher course per 40 CFR 265.16(c) and Ohio Administrative Code (OAC) 3745-55-16-C.

Page 4-4, 1(a, b, c)

Although the facility has an SPCC Plan, it has not been adequately amended to meet the requirements of 40 CFR 265.51 and Ohio Administrative Code 3745-55-51, which addresses arrangements or agreements with local or state emergency authorities and listed names, addresses, and telephone numbers of all persons qualified to act as emergency coordinator.

Also, Number 2, which addresses 40 CFR 265.53 and OAC 3745-55-53 which states that copies of the Contingency Plan be sent to all local and state emergency service authorities.

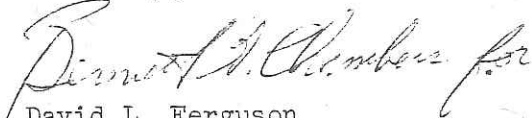
A RCRA Contingency Plan Checklist is enclosed for your assistance. If you follow the checklist, you will be well prepared for the Part B application to the Federal EPA.

Vincent Passaro
September 7, 1982
Page 2

Please send a copy of the Plan to me at this office within 60 days of the date of this letter. Also, I will remind you to send a copy to Tom Crepeau in Columbus for the purposes we discussed previously.

If you have any questions about the inspection, please call me at 352-8461.

Sincerely,

A handwritten signature in cursive script, appearing to read "David L. Ferguson for".

David L. Ferguson
Environmental Scientist

DLF/kb

Enclosure

cc: Kathy Homer, U.S. EPA, Region V w/encl. ✓
cc: Paula Cotter, DHM, CO w/encl.

RCRA INTERIM STATUS INSPECTION FORM

PART 1. GENERAL INFORMATION

U.S. EPA I.D. NO. OH 00 4167219

Facility: Union Carbide Corp. *Carbon Products Division* Address: 200 North St. City: Easton
 State: OH Zip Code: 44830 County: Seaco Telephone: 419-435-8181
 Facility Operator: Vincent Passaro Title: Env. Coord. Telephone: Same
 Facility Owner: Union Carbide Corp. Address: Old Ridgeberry Rd.
 City: Dearbuck State: CT Zip Code: 06817 Telephone: _____
 Type of Ownership: ☒ Private _____ Government _____ State HWFAB No. 03-74-385

Date of Inspection: 8-26-82 Time of Inspection: (Start) 1:30 (Finish) 4:30

Advance Notification? ☐ No ☒ Yes: _____

Weather Conditions: Sunny, Cool, 70's

INSPECTION PARTICIPANT(S)

(Name)	(Title)	(Telephone)
1. <u>Vincent Passaro</u>	<u>Env. Coordinator</u>	<u>419-435-8181</u>
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____

RCRA INTERIM STATUS INSPECTION FORM

INSPECTOR(S)

(Telephone)

(Title)

(Name)

449-352-8461

Environmental Scientist

David L. Ferguson

1. _____
2. _____
3. _____
4. _____

1. Type(s) of hazardous waste site activity: A. ☒ Generation B. ☒ Storage C. _____ Treatment
D. _____ Transportation E. _____ Disposal

2. Specific hazardous wastes handled at this facility (EPA HW#):

a) Listed Wastes: F001, F002, F008. — small amt's: 4002, 4013, 4021, 4125, 4220, 4228, 4239, _____

b) Non-Listed Wastes: ☒ I ☒ C ☐ R ☐ T
D001 D002 D003 D000
D008

3. Has this facility submitted a Part A Permit Application? ☒ Yes _____ No
4. Does this facility store, treat or dispose of any hazardous waste from any off-site domestic sources?

Yes, See Remark # _____ ☒ Yes _____ No

RCRA INTERIM STATUS INSPECTION FORM

5. Does this facility store, treat or dispose of any hazardous waste from any foreign sources?

Yes, See Remark # _____ ☒ No

6. Does this facility transport hazardous waste material(s) off-site for itself or other generators?

Yes, Complete Part 3 (Transp.) ☒ No

a) Applicable U.S. EPA I.D. Number _____

b) Ohio P.U.C.O. GR TRSF Number _____

7. A brief description of site activity:

Mfg. plant for production of wide range of carbon & graphite products, including battery electrodes, arc carbons, brush blocks, and flexible carbon & graphite cloth.

REMARKS, PART 1. (GENERAL INFORMATION)

RCRA INTERIM STATUS INSPECTION FORM

PART 4. GENERAL INTERIM STATUS REQUIREMENTS

SUBPARTS INCLUDED

B: General Facility Standards	E: Manifest/Records/Reporting	H: Financial Requirements
C: Preparedness and Prevention	F: Ground Water Monitoring	
D: Contingency and Emergency	G: Closure	

Subpart B: General Facility Standards

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
1. The operator has a detailed chemical and physical analysis of the waste material containing all of the information which must be known to properly treat or store the waste as required by Sections 265.13(a)(1) and 3745-55-13-A-2.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The operator has a written waste analysis plan which describes analytical parameters, test methods, sampling methods, testing frequency and responses to any process changes that may affect the character of the waste (Sections 265.13(b) and 3745-55-13-B).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. If required due to the actual hazards associated with the waste material, the operator has prevented unauthorized access to the active portions of the facility and has provided the following features and equipment (Sections 265.14 and 3745-55-14).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a) 24 hour surveillance system.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Artificial or natural barrier completely surrounding the active portion of the facility.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Controlled entry (gates, monitors) to the active portion of the facility at all times (265.14(2)(ii) and 3745-55-14-B-2-b).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) "Danger-Unauthorized Personnel Keep Out" signs at each entrance to the active portion of the facility (265.14(c) and 3745-55-14-C).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RCRA INTERIM STATUS INSPECTION FORM

	Yes	No	N/A	Remark #
4. The operator must develop and follow a comprehensive, written inspection plan and must document the inspections, malfunctions and any remedial actions taken in an operating record log which is kept for at least three years. The plan includes the following elements: (Sections 265.15 and 3745-55-15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
a) Inspect emergency equipment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Inspect monitoring equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Inspect security, alarm and communications devices.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d) Inspect process equipment (pipes, pumps, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Inspect containment structures (dike, curbs, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f) Inspect facility for structural malfunctions (roof, floor, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
g) Inspect hazardous waste handling/loading areas each day used.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
h) Record of any malfunctions due to equipment or operator errors.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
i) Record of any hazardous waste discharges.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Raw Materials
5. The facility has provided a Personnel Training Program in compliance with Sections 265.16(a)(b)(c) and 3745-55-16-A-B-C including instruction in safe equipment operation and emergency response procedures, training new employees within 6 months and providing an annual training program refresher course.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No documentation Refresher course
6. The facility keeps all records required by Sections 265.16(d)(e) and 3745-55-16-D-E including written job titles, job descriptions and documented employee training records.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. If required due to the actual hazards associated with Ignitable, Reactive or incompatible waste materials, the facility meets the following requirements (Sections 265.17 and 3745-55-17).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

RCRA INTERIM STATUS INSPECTION FORM

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
a) Protection from sources of ignition.	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
b) Physical separation of incompatible waste materials.	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
c) "No Smoking" or "No Open Flames" signs near areas where Ignitable or Reactive wastes are handled.	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
d) Any co-mingling of waste materials is done in a controlled, safe manner as prescribed by Sections 265.17(b) and 3745-55-17-B.	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>

Subpart C: Preparedness and Prevention

1. Has there been a fire, explosion or non-planned release of hazardous waste at this facility? (265.31 and 3745-55-31).	<u>—</u>	<u>X</u>	<u>—</u>	<u>—</u>
2. If required due to actual hazards associated with the waste material, the facility has the following equipment: (265.32 and 3745-55-32).	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
a) Internal alarm system.	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
b) Access to telephone, radio or other device for summoning emergency assistance.	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
c) Portable fire control equipment.	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
d) Water at adequate volume and pressure via hoses sprinklers, foamers or sprayers.	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
3. All required safety, fire and communications equipment is tested and maintained as necessary; testing and maintenance are documented. (265.33 and 3745-55-33).	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
4. If required due to the actual hazards associated with the waste material, personnel have immediate access to an emergency communication device during times when hazardous waste is being physically handled (Sections 265.34 and 3745-55-34).	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>

RCRA INTERIM STATUS INSPECTION FORM

	Yes	No	N/A	Remark #
5. If required due to the actual hazards associated with the waste material, adequate aisle space to allow unobstructed movement or emergency or spill control equipment is maintained (265.35 and 3745-55-35).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. If required due to the actual hazards associated with the waste material, the facility has attempted to make appropriate arrangements with local emergency service authorities to familiarize them with the possible hazards and the facility layout (265.37(a) and 3745-55-37-A).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Where state or local emergency service authorities have declined to enter into any proposed special arrangements or agreements the refusal has been documented (265.37(b) and 3745-55-37-B).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>Subpart D: Contingency and Emergency</u>				
1. The facility has a written Contingency Plan designed to minimize hazards from fires, explosions or unplanned releases of hazardous wastes (265.51 and 3745-55-51) and contains the following components:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Not Specific Enough</i>
a) Actions to be taken by personnel in the event of an emergency incident.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Not Specific enough</i>
b) Arrangements or agreements with local or state emergency authorities.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c) Names, addresses and telephone numbers of all persons qualified to act as emergency coordinator.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>No Address</i>
d) A list of all emergency equipment including location, physical description and outline of capabilities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e) If required due to the actual hazards associated with the waste(s) handled, an evacuation plan for facility personnel (Sections 265.51(f) and 3745-55-51-F).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. A copy of the Contingency Plan and any plan revisions is maintained on-site and has been submitted to all Local and State emergency service authorities that might be required to participate in the execution of the plan. (Sections 265.53 and 3745-55-53).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

RCRA INTERIM STATUS INSPECTION FORM

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
3. The plan is revised in response to facility, equipment and personnel changes or failure of the plan (265.54 and 3745-55-54).	<u>X</u>	<u>—</u>	<u>—</u>	<u>In Process</u>
4. An emergency coordinator is designated at all times (on-site or on-call) is familiar with all aspects of site operation and emergency procedures and has the authority to implement all aspects of the Contingency Plan (Sections 265.55 and 3745-55-55).	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
5. If an emergency situation has occurred, the emergency coordinator has implemented all or part of the Contingency Plan and has taken all of the actions and made all of the notifications deemed necessary under Sections 265.56 and 3745-55-56.	<u>—</u>	<u>—</u>	<u>X</u>	<u>—</u>

Subpart E: Manifests/Records/Reporting

NOTE: THE FOLLOWING REQUIREMENTS ARE APPLICABLE TO BOTH ON-SITE AND OFF-SITE TREATMENT, STORAGE AND DISPOSAL FACILITIES.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
1. The operator maintains a written operating record at his facility as required by Sections 265.73 and 3745-55-73 which contains the following information:	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
a) Description and quantity of each hazardous waste treated, stored or disposed of within the facility and the date(s) and method(s) pertinent to such treatment storage or disposal (262.73(b)(1) and 3745-55-73-B-1).	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
b) Common name, EPA Hazardous Waste Identification Number and physical state (liquid, solid, gas) of the waste(s).	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
c) The estimated (or actual) weight, volume or density of the waste material(s).	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>
d) A description of the method(s) used to treat, store or dispose of the waste(s) using the EPA Handling Codes listed in 45 FR 33252 (May 19, 1980).	<u>X</u>	<u>—</u>	<u>—</u>	<u>—</u>

RCRA INTERIM STATUS INSPECTION FORM

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
e) The present physical location of each hazardous waste within the facility.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) <u>FOR DISPOSAL FACILITIES</u> , the location and quantity of each hazardous waste recorded on a map of the facility and cross-references to any pertinent manifest document number(s) (265.73(b)(2) and 3745-55-73-8-2).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Records of any waste analyses and trial tests required to be performed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Records of the inspections required under Sections 265.15 and 3745-55-15 (General Inspection Requirements - Subpart B).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Records of any monitoring, testing or analytical data required under other Subparts as referenced by Sections 265.73(b)(6) and 3745-55-73-B-6.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Records of Closure cost estimates and Post-Closure (DISPOSAL ONLY) cost estimates required under Subpart H and Section 3745-56-30, 32 and 34.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. The operator has submitted an annual Treatment-Storage-Disposal Operating Report (by March 1) containing all of the operating information required under Sections 265.75 and 3745-55-75.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: THIS REPORT IS NOT THE SAME AS THE REPORT REQUIRED TO BE FILED BY GENERATORS UNDER SECTIONS 262.41 AND 3745-52-41.

3. When applicable, the operator has submitted reports on releases of hazardous wastes, fires, explosions, groundwater contamination data and facility closure (265.77 and 3745-55-77).

NOTE: THE FOLLOWING REQUIREMENTS ARE APPLICABLE TO ONLY OFF-SITE TREATMENT, STORAGE AND DISPOSAL FACILITIES.

4. Manifests received by the facility are signed and dated; one copy is given to the transporter, one copy is sent to the generator within 30 days and one copy is kept for at least 3 years (Sections 265.71 and 3745-55-71).

RCRA INTERIM STATUS INSPECTION FORM

<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

a) If shipping papers are used in lieu of manifests (bulk shipments, etc.) the same requirements are met (265.71(b) and 3745-55-71-B).

b) Any significant discrepancies in the manifest, as defined in Sections 265.72(a) and 3745-55-72-A, are noted in writing on the manifest document (Sections 265.71(a)(2) and 3745-55-71-A-2).

5. Any manifest discrepancies have been reconciled within 15 days as required by Sections 265.72(b) and 3745-55-72-B or the operator has submitted the required information to the Regional Administrator/Director.

6. If the facility has accepted any unmanifested hazardous wastes from off-site sources (except from small quantity generators) for treatment, storage or disposal an unmanifested waste report containing all the information required by Sections 265.76 and 3745-55-76 has been submitted to the Regional Administrator/Director within 15 days.

Subpart F: Groundwater Monitoring

NOTE: THESE REQUIREMENTS ARE APPLICABLE TO SURFACE IMPOUNDMENTS, LANDFILLS AND LAND TREATMENT FACILITIES ON AND AFTER NOVEMBER 19, 1981.

<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
—	—	—	—
—	—	—	—
—	—	—	—

1. The facility has implemented one or more of the following alternatives with respect to the Groundwater Monitoring requirements in Sections 265.90(a) and 3745-55-90-A:

a) A Groundwater Monitoring System meeting the minimum requirements of Sections 265.91 and 3745-55-91 has been installed which is sampled, tested and operated in accordance with the requirements of Sections 265.92, 265.93, 265.94, 3745-55-92, -93 and -94.

RCRA INTERIM STATUS INSPECTION FORM

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
b) A waiver of all or part of the Groundwater Monitoring requirements has been obtained by demonstrating a low potential for the migration of hazardous wastes and constituents in accordance with the requirements of Sections 265.90(c) and 3745-55-91-C.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) An alternate Groundwater Monitoring System Plan that was first submitted to the Regional Administrator/Director was implemented and is operated and maintained in accordance with Sections 265.90(d) and 3745-55-90-D.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Subpart G: Closure and Post-Closure

NOTE: THE FOLLOWING REQUIREMENTS ARE APPLICABLE TO BOTH DISPOSAL AND NON-DISPOSAL FACILITIES:

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
1. A written Closure Plan is on file at the facility and contains the following elements: (Sections 265.112 and 3745-56-03)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
a) A description of how and when the facility will be closed (265.112(a)(1) and 3745-56-03-A-1).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Not when See 1(e)</i>
b) A description of how any of the applicable closure requirements in other Subparts of Sections 265 and 3745-55,-56,-57,-58 (Tanks, Surface Impoundments, Landfills, etc.) will be carried out.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) An estimate of the maximum amount of hazardous wastes being treated or in storage at the facility.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d) A description of steps taken to decontaminate facility equipment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e) The year closure is expected to begin and a list of dates over which the various phases of closure are expected to be completed.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>While check on company policy to be sure</i>
2. The Closure Plan has been amended within 60 days in response to any changes in facility design, processes or closure dates.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

RCRA INTERIM STATUS INSPECTION FORM

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
3. The Closure Plan has been submitted to the Regional Administrator/Director 180 days prior to beginning the Closure process.	—	—	—	—
4. If Closure has been completed, the facility was closed in a manner which minimizes any future problems in compliance with the Closure performance standard in Sections 265.111 and 3745-56-02.	—	—	—	—
a) The facility has been closed within the time limits specified in Sections 265.113 and 3745-56-04.	—	—	—	—
b) Upon completion of Closure all facility equipment and structures were decontaminated and any hazardous residues were properly disposed of (265.114 and 3745-56-05).	—	—	—	—
c) Completion of Closure has been certified to the Regional Administrator by the Owner/Operator and an independent Professional Engineer (265.115 and 3745-56-06).	—	—	—	—

NOTE: THE FOLLOWING REQUIREMENTS ARE APPLICABLE TO ONLY DISPOSAL FACILITIES.

5. A written Post-Closure Plan is on file at the facility which describes all Post-Closure activities and addresses all of the plan elements required by Sections 265.113(a) and 3745-56-08-A.	—	—	—	—
6. The Post-Closure Plan has been amended within 60 days in response to any changes in facility design or operation.	—	—	—	—
7. The Post-Closure Plan has been submitted to the Regional Administrator/Director 180 days prior to beginning Closure.	—	—	—	—
8. The Owner/Operator has submitted all of the information on prior use of the property required in Sections 265.119 and 3745-56-10 to the Local Land Authority within 90 days after Closure is completed.	—	—	—	—

RCRA INTERIM STATUS INSPECTION FORM

Yes No N/A Remark #

9. The property owner has attached a notation to the property deed or other instrument which will notify any potential purchaser that the property has been used to manage hazardous waste and future use of the property is restricted under Sections 265.117(c) and 3745-56-08-C as required in Sections 265.120 and 3745-56-10.

~~_____~~ ~~_____~~ ~~_____~~ ~~_____~~

Subpart H: Financial Requirements

1. A written cost estimate for Closure of the facility (by the methods and procedures specified in the facility Closure Plan) is available for review on and after May 19, 1981 (Sections 265.142 and 3745-56-32).

X _____ _____ _____

NOTE: REGULATIONS PROMULGATED IN 46 FR 2877-2892 IN REGARD TO FINANCIAL REQUIREMENTS HAVE BEEN STAYED UNTIL OCTOBER 13, 1981 AND MAY BE AMENDED OR REPROPOSED AT THAT TIME.

REMARKS, PART 4. GENERAL INTERIM STATUS REQUIREMENTS

RCRA INTERIM STATUS INSPECTION FORM

PART 5. TREATMENT/STORAGE/DISPOSAL

SUBPARTS INCLUDED

I: Management of Containers	L: Waste Piles	O: Incinerators
J: Management of Tanks	M: Land Treatment	P: Thermal Treatment
K: Surface Impoundments	N: Landfills	Q: Chemical/Physical/Biological Treatment

Subpart I: Management of Containers

Yes	No	N/A	Remark #
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1. Hazardous wastes are stored in closed containers which are in good physical condition and are compatible with the wastes stored in them (Sections 265.171, .172, .173 and 3745-56-51, -52-53).

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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2. The area where containers are stored is inspected for evidence of leaks or corrosion at least weekly and such inspections are documented (265.174 and 3745-56-54).

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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NOTE: FACILITIES OPTING FOR LONG TERM STORAGE ARE NOT REQUIRED TO MEET PRE-TRANSPORT LABELING REQUIREMENTS UNTIL THE CONTAINERS ARE ACTUALLY OFFERED FOR TRANSPORT AND ARE NOT REQUIRED TO AFFIX AN ACCUMULATION DATE. (SECTIONS 262 AND 3745-52)

3. Containers holding Ignitable or Reactive waste(s) are located at least 50 feet (15 Meters) from the property line and the general requirements for handling such wastes in Sections 265.17 and 3745-55-17-B (physical separation, signs and safety) are met (265.176 and 3745-56).

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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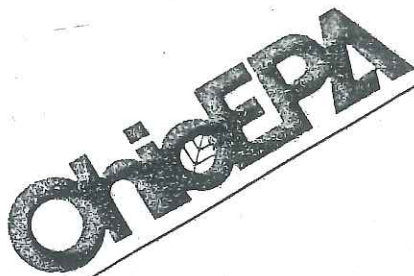
4. Incompatible waste materials are not placed in the same containers or put in contaminated containers unless it is done under completely controlled and safe conditions as specified in Sections 265.17(b) and 3745-55-17-B (Sections 265.177(a), (b) and 3745-56-57-A-B).

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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RCRA INTERIM STATUS INSPECTION FORM

<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
<u>X</u>	<u> </u>	<u> </u>	<u> </u>

5. Containers holding hazardous wastes are never stored near other materials which may interact with the waste in a hazardous manner (Sections 265.177 (C) and 3745-56-57-C).



Re: Application Number 81-HW-0385
Seneca County

August 28, 1981

RECEIVED

AUG 31 1981

WASTE MANAGEMENT BRANCH
EPA, REGION V

Mr. William Glasgow, Chief Engineer
Union Carbide Corporation
Carbon Products Division
P.O. Box J
Fostoria, Ohio 44830

Dear Mr. Glasgow:

On July 16, 1981, Thomas Wray of the Ohio EPA conducted an inspection of your facility, as part of the Hazardous Waste facility permit review process. Your facility was represented by Gary Niedenthal.

Enclosed are two forms. The one titled "TREATMENT, STORAGE AND DISPOSAL FACILITY" is a copy of the form used during the inspection to evaluate your facility.

The other form, "DEFICIENCY NOTIFICATION TABLE", relates to the "TREATMENT, STORAGE AND DISPOSAL FACILITY" form and specifies what action must be taken where deficiencies were noted. A mark in column four of the "DEFICIENCY NOTIFICATION TABLE" denotes a violation of current regulations or pinpoints areas which will be covered by regulations not yet effective. The capital letter codes in column four are explained on the last page of the "DEFICIENCY NOTIFICATION TABLE".

You are hereby advised that total compliance with the regulations contained in 40 CFR 265 is required as a condition of continuing interim status with the U.S. EPA. Failure to list specific deficiencies in this communication does not relieve you from the responsibility of complying with all applicable regulations.

Very truly yours,

Paul Flanigan, P.E.
Hazardous Waste Materials Management

PF/bsr

cc: Kathleen Homer, U.S. EPA, Region V
Thomas Wray, NWDO

CERTIFIED MAIL

DEFICIENCY NOTIFICATION TABLE
ISS INSPECTION

FACILITY NO. - *81-HW-0385*
OWNER - *Union Carbide Corp.*
FACILITY NAME - *Carb. Prod. Div.*
FACILITY LOCATION - *Festonia, Ohio*
FACILITY CONTACT - *B. Niedenthal*
ISS INSPECTION DATE - *7/16/81*

PHONE NO. - *(419) 431-8181*
Ext. 215

Page	COLUMN I Item No.	COLUMN II OAC Reference	COLUMN III USEPA Reference	COLUMN IV See Code Following	COLUMN V Refer To ISS Remark	COLUMN VI OEPA Use
3	III A 1	3745-55-12(A)	265.12 (A)			
	2					
	B 1	3745-55-13	265.13			
	2	3745-55-13	265.13			
	3	"	"	B	✓	
	C 1	3745-55-14	265.14			
	2	"	"			
	3	"	"			
	4	"	"			
	D 1	3745-55-15	265.15			
	2	"	"			
	3	"	"			
4	4	"	"			
	5	"	"			
	6	"	"			
	7	"	"			
	8	"	"			
	E 1	3745-55-16	265.16			
	2	"	"			
	3	"	"	B	✓	
	4	"	"			
	5	"	"			
	6	"	"			
	F 1	3745-55-17	265.17			
	2	"	"			
	3	"	"			
5	IV A 1	3745-55-31	265.31			
	B 1	3745-55-32	265.32			
	2	"	"			
	3	"	"			
	C 1	3745-55-33	265.33			
	2	"	"			
	D 1	3745-55-34	265.34			
	E	3795-55-35	265.35			
	V A 1	3745-55-52	265.52	B	✓	

Page	Item No.	OAC Reference	USEPA Reference	See Code Following	Refer To ISS Remark	OEPA Use
	A 2	3745-55-52	265.52			
	3	"	"			
	4	"	"			
	5	"	"			
7	B 1	3745-55-53	265.53			
	C 1	3745-55-55	265.55			
	2	"	"			
	3	"	"			
	D 1	3745-55-56	265.56			
VI	A 1	3745-55-71	265.71			
	2	"	"			
	B 1	3745-55-72	265.72			
8	C 1	3745-55-73	265.73		✓	
	2b	"	"	B	✓	
	c	"	"	B	✓	
	d	"	"			
	e	"	"			
	f	"	"			
	g	"	"			
9	VII A 1	3745-56-03	265.112			
	2	"	"			
	3	"	"			
	4	3745-56-32	265.142			
	B 1	3745-56-09	265.118			
	VIII I 1	3745-56-51	265.171			
	2	3745-56-52	265.172			
	3	3745-56-53	265.173			
	4	"	"			
	5	3745-56-54	265.174			
	6	3745-56-56	265.176			
10	7	3745-56-57	265.177			
	8	"	"			
	J 1	3745-56-72	265-192			
	2	"	"			
	3	"	"			
	4	3745-56-73	265-193			
	5	3745-56-74	265.194			
	6	3745-56-78	265.198			
	7	3745-56-79	265.199			
11	8	3745-56-78	265.198			
	K 1	3745-57-03	265.222			
	2	3745-57-04	265.223			
	3	3745-57-06	265.225			
	4	3745-57-07	265.226			
	5	"	"			
	6	3745-57-10	265.229			
	7	3745-57-11	265.230			

Page	Item No.	OAC Reference	USEPA Reference	See Code Following	Refer To ISS Remark	OEPA Use
12	L	1	3745-57-31	265.251		
		2	3745-57-32	265.252		
		3		265.258		
		4	3745-57-36	265.256		
		5	"	"		
		6	3745-57-37	265.257		
		7	3745-57-37	265.257		
13	M	1	3745-57-52	265.272		
		2	"	"		
		3	3745-57-53	265.273		
		4	3745-57-56	265.276		
		5	3745-57-58	265.278		
		6	3745-57-58	265.278		
		7	3745-57-59	265.279		
		8	3745-57-61	265.281		
		9	3745-57-62	265.282		
14	N	A	1	3745-57-72	265.302	
			2	"	"	
			3	"	"	
			4	"	"	
	B	1	3745-57-79	265.309		
		2	"	"		
	C	1	3745-56-03	265.112		
		2	"	"		
		3	"	"		
		4	3745-56-32	265.192		
	D	1	3745-57-82	265.312		
			3745-55-17	265.17(b)		
	E	1	3745-57-83	265.313		
		2	3745-55-17	265.17(b)		
	F	1	3745-57-84	265.314		
		2	"	"		
		3	"	"		
		4	"	"		
16	G	1	3745-57-85	265.315		
		O&P				
	I	B	1	3745-58-33	265.373	
			2	"	"	
			3	"	"	
			4	"	"	
			5	"	"	
	II	A	1a	3745-58-35	265.375	
			b	"	"	
			c	"	"	
		2a	3745-58-35	265.375		
			b	"	"	
		B	1	"	"	
			2	"	"	
			3	"	"	
			4	"	"	
			5	"	"	

Page	Item No.	OAC Reference	USEPA Reference	See Code Following	Refer To ISS Remark	OEPA Use
	III A 1	3745-58-37	265.377			
	B 1	"	"			
	C 1	"	"			
	D 1	"	"			
	E 1	"	"			
	F 1	"	"			
	G 1	"	"			
18	IV A 1	3745-58-42	265.382			
	2	"	"			
	Q 1	3745-58-51	265.401			
	2	"	"			
19	3	3745-58-52	265.402			
	4	3745-58-53	265.403			
	5	3745-58-55	265.405			
	6	3745-58-56	265.406			
	IX I (A)	3745-52-40	262.40			
	(B) 1	3745-52-21	262.21			
	2	"	"			
20	3	"	"			
	4	"	"			
	5	"	"			
	6	"	"			
	7	"	"			
	8	3745-52-42	262.42			
	(C)	3745-52-30	262.30			
	2 (A)	3745-52-31	262.31			
	(B)	3745-52-33	262.33			
	(C)	3745-52-34	262.34			
21	3 1	"	"			
	2	"	"			
	3	3745-56-54	265.174			
	4a	3745-56-72	265.192			
	b	"	"			
	c	"	"			
	d	3745-56-74	265.184			
	e	3745-56-78	265.198			
	f	3745-56-79	265.199			
22	VI A	3745-52-40	262.40			
	B	3745-52-41	262.41			
	VII 1a	3745-52-50	262.50			
	b	"	"			
	c	"	"			
	2	"	"			
23 X	I	3745-53-22	263.22			
	II A	3745-53-20	263.20			
	B	"	"			
	V A	3745-53-10	263.10			
	B	3745-53-10	"			

KEY TO CODED ITEMS (COLUMN IV)

- A. Because the inspection at this facility was conducted prior to May 19, 1981, requirements which became effective on that date were not checked. These requirements are now effective and must be met as a condition of interim status under the federal regulations and as part of the considerations for issuance of an Ohio Hazardous Waste Permit.
- B. or C. The inspection revealed a deficiency in compliance with this item, which must be satisfactorily corrected. A determination of compliance will be made in the future.
- D. The inspection revealed a violation of regulations pertaining to this item. Since the environmental consequences of this violation may be quite serious this problem must be corrected as soon as possible. We will schedule another inspection no sooner than 30 days after the date of this letter to determine if compliance has been achieved. Further steps in the permitting process will be delayed until the re-inspection.
- E. Regulations concerning this item will become effective November 19, 1981. These requirements were not addressed in the inspection, but compliance is required by November 19, in order to meet federal interim status requirements and as a part of the considerations in issuing an Ohio Hazardous Waste Permit.
- F. Inspection revealed non compliance with this item. Compliance with this item is required unless a facility has filed as a storage facility. You should either correct the deficiency listed or file an amended Part A application for a storage facility.
- G. NFPA's code requires that the tanks be located 50 feet from the property line.

STATE IDENTIFICATION NUMBER

87-HW 2358

EPA IDENTIFICATION NUMBER

CAD 004167219

TREATMENT, STORAGE, AND DISPOSAL FACILITIES
Form A.- General Facility Standards

I. General Information:

- (A) Facility Name: UNION CARBIDE CORPORATION - CARBON PRODUCTS Division
(B) Street: 200 NORTH STREET
(C) City: FOSTERIA (D) State: OH (E) Zip Code: 44830
(F) Phone: 419-435-8151 (G) County: SENECA
(H) Operator: _____
(I) Street: _____
(J) City: _____ (K) State: _____ (L) Zip Code: _____
(M) Phone: _____ (N) County: _____
(O) Owner: _____
(P) Street: 270 PARK AVENUE
(Q) City: NEW YORK (R) State: NEW YORK (S) Zip Code: 10017
(T) Phone: _____ (U) County: _____
(V) Date of Inspection: 7/16/81 (W) Time of Inspection (From) 9:20 (To) _____
(X) Weather Conditions: _____

Part A
Storage
Containers

555
Containers

(Y) Person(s) Interviewed	Title	Telephone
<u>GARY KILDENFALL</u>	<u>CHIEF PLT ENG</u>	<u>419 461 8181</u>
<u>VINCE MELONI</u>	<u>ENV. COORDINATOR</u>	<u>EXT 215</u>
		<u>EXT 219</u>
(Z) Inspection Participants	Agency/Title	Telephone
<u>LEON SHAFER</u>		<u>419-352-8461</u>
<u>THOMAS R. CUNY</u>	<u>HOL. WASTE SCIENTIST</u>	<u>419-352-8461</u>
(AA) Preparer Information		
Name	Agency/Title	Telephone
<u>THOMAS R. CUNY</u>	<u>HOL. WASTE SCI</u>	<u>419-352-8461</u>

II. SITE ACTIVITY:

Complete sections I through VII for all treatment, storage, and/or disposal facilities. Complete the forms (in parenthesis) in section VIII corresponding to the site activities identified below:

- | | |
|--|--|
| <p><u>X</u> A. Storage and/or Treatment</p> <p>1. Containers (I)</p> <p>2. Tanks (J)</p> <p>3. Surface Impoundments (K)</p> <p>4. Waste Piles (L)</p> <p><u> </u> B. Land Treatment (M)</p> <p><u> </u> C. Landfills (N)</p> | <p><u> </u> D. Incineration and/or Thermal Treatment (O and P)</p> <p><u> </u> E. Chemical, Physical, and Biological Treatment (Q)</p> |
|--|--|

Note: If facility is also a generator or transporter of hazardous waste complete sections IX and X of this form as appropriate.

III. GENERAL FACILITY STANDARDS:
(Part 265 Subpart B)

Yes No NI* Remark

(A) Has the Regional Administrator been notified regarding:

1. Receipt of hazardous waste from a foreign source? N/A — — _____

2. Facility expansion? N/A — — _____

(B) General Waste Analysis:

1. Has the owner or operator obtained a detailed chemical and physical analysis of the waste? X — — _____

2. Does the owner or operator have a detailed waste analysis plan on file at the facility? X — — _____

3. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site? — X — HAS BEEN SHIPPED BY WASTE EXCISE TITIGATION - EPCALINE FOR RECYCLE

(C) Security - Do security measures include: (if applicable)

1. 24-Hour surveillance? X — — _____

2. Artificial or natural barrier around facility? X — — _____

3. Controlled entry? X — — _____

4. Danger sign(s) at entrance? X — — _____

(D) Do Owner or Operator Inspections Include:

1. Records of malfunctions? X — — _____

2. Records of operator error? X — — _____

3. Records of discharges? X — — _____

II. GENERAL FACILITY STANDARDS - Continued

	Yes	No	NI*	Remarks
4. Inspection schedule?	<u>✓</u>	---	---	-----
5. Safety, emergency equipment?	<u>X</u>	---	---	-----
6. Security devices?	<u>X</u>	---	---	-----
7. Operating and structural devices?	<u>N/A</u>	---	---	-----
8. Inspection log?	<u>Δ</u>	---	---	-----
(E) Do personnel training records include: (Effective 5/19/81)				
1. Job titles?	<u>X</u>	---	---	-----
2. Job descriptions?	<u>X</u>	---	---	-----
3. Description of training?	---	---	---	<u>Should be more specific</u>
4. Records of training?	<u>X</u>	---	---	-----
5. Have facility personnel received required training by 5-19-81?	<u>X</u>	---	---	-----
6. Do new personnel receive required training within six months?	<u>Y</u>	---	---	-----
(F) If required are the following special requirements for ignitable, reactive, or incompatible wastes addressed?				
1. Special handling?	<u>X</u>	---	---	-----
2. No smoking signs?	<u>Y</u>	---	---	-----
3. Separation and protection from ignition sources?	<u>Δ</u>	---	---	-----

*Not Inspected

IV. PREPAREDNESS AND PREVENTION:
(Part 265 Subpart C)

(A) Maintenance and Operation of Facility:

Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?

Yes No NI* Remarks

— X —

(B) If required, does the facility have the following equipment:

1. Internal communications or alarm systems?

X — —

2. Telephone or 2-way radios at the scene of operations?

X — —

BOTH

3. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?

X — —

Indicate the volume of water and/or foam available for fire control:

ON CITY WATER, RESERVOIR AVAILABLE AS BACK-UP IN EMERGENCY

(C) Testing and Maintenance of Emergency Equipment:

1. Has the owner or operator established testing and maintenance procedures for emergency equipment?

X — —

2. Is emergency equipment maintained in operable conditions?

X — —

(D) Has owner or operator provided immediate access to internal alarms? (if needed)

X — —

- (E) Is there adequate aisle space for unobstructed movement?

X — — —

V. CONTINGENCY PLAN AND EMERGENCY PROCEDURES:
(Part 265 Subpart D)

- (A) Does the Contingency Plan contain the following information:

Yes No NI* Remarks

1. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.)
2. Arrangements agreed by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?
3. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?
4. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?
5. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?)

X — — —

*NOTHING SPECIFIC FOR
MINOR INCIDENTS OR
IMMEDIATE REMEDIAL MEASURE*

X — — —

X — — —

X — — —

X — — —

V. CONTINGENCY PLAN AND EMERGENCY PROCEDURES - Continued

	Yes	No	NI*	Remarks
(B) Are copies of the Contingency Plan available at site and local emergency organizations?	<u>X</u>	—	—	
(C) Emergency Coordinator				
1. Is the facility Emergency Coordinator identified?	<u>X</u>	—	—	
2. Is coordinator familiar with all aspects of site operation and emergency procedures?	<u>X</u>	—	—	
3. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	<u>X</u>	—	—	
(D) Emergency Procedures				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?	—	—	—	<u>MANIFEST OCCURRED</u>

VI. MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING (Part 265 Subpart E)

	Yes	No	NI*	Remarks
(A) Use of Manifest System				
1. Does the facility follow the procedures listed in §265.71 for processing each manifest?	<u>X</u>	—	—	
2. Are records of past shipments retained for 3 years?	<u>X</u>	—	—	
(B) Does the owner or operator meet requirements regarding manifest discrepancies?	<u>X</u>	—	—	

(C) Operating Record

1. Does the owner or operator maintain an operating record as required in 265.73?

X — —

LIMITED

2. Does the operating record contain the following information:

**b. The method(s) and date(s) of each waste's treatment, storage, or disposal as required in Appendix I?

— X —

c. The location and quantity of each hazardous waste within the facility?

X — —

QUANTITY NOT IDENTIFIED

***d. A map or diagram of each cell or disposal area showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.)

N/A — —

e. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections?

X — —

f. Reports detailing all incidents that required implementation of the Contingency Plan?

X — —

g. All closure and post closure costs as applicable? (Effective 5-19-81)

X — —

** See page 33252 of the May 19, 1980, Federal Register.

*** Only applies to disposal facilities

VII. CLOSURE AND POST CLOSURE
(Part 265 Subpart G)

	Yes	No	NI*	Remarks
(A) Closure and Post Closure				
1. Is the facility closure plan available for inspection by May 19, 1981?	<u>X</u>	—	—	_____
2. Has this plan been submitted to the Regional Administrator	—	<u>Y</u>	—	_____
3. Has closure begun?	—	<u>X</u>	—	_____
4. Is closure estimate available by May 19, 1981?	<u>X</u>	—	—	<u>NEEDS TO BE MORE SPECIFIC</u>
(B) Post closure care and use of property				
Has the owner or operator supplied a post closure monitoring plan? (effective by May 19, 1981)			<u>N/A</u>	_____

VIII. FACILITY STANDARDS
(Part 265, Subparts I thru R)

I
USE AND MANAGEMENT OF CONTAINERS

Facility Name: Union Carbide Corp Date of Inspection: 7/10/81

	Yes	No	NI*	Remarks
1. Are containers in good condition?	<u>X</u>	—	—	_____
2. Are containers compatible with waste in them?	<u>X</u>	—	—	_____
3. Are containers stored closed?	<u>Y</u>	—	—	_____
4. Are containers managed to prevent leaks?	<u>X</u>	—	—	_____
5. Are containers inspected weekly for leaks and defects?	<u>X</u>	—	—	_____
6. Are ignitable & reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive.)	<u>N/A</u>	—	—	_____

	Yes	No	NI*	Remarks
3. Has the owner or operator addressed the waste analysis requirements of 265.402?	_____	_____	_____	_____
4. Are inspection procedures followed according to 265.403?	_____	_____	_____	_____
5. Are the special requirements fulfilled for ignitable or reactive wastes?	_____	_____	_____	_____
6. Are incompatible wastes treated? (If yes, 265.17(b) applies.)	_____	_____	_____	_____

Note: EPA has temporarily suspended the applicability of the requirements of the hazardous waste regulations in 40 CFR Parts 122, 264 and 265 to owners and operators of (1) wastewater treatment tanks that receive, store, and treat wastewaters that are hazardous waste or that generate, store or treat a wastewater treatment sludge which is a hazardous waste where such wastewaters are subject to regulation under Sections 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 et seq.) and (2) neutralization tanks, transport vehicles, vessels, or containers which neutralize wastes which are hazardous only because they exhibit the corrosivity characteristic under 40 CFR §261.22 or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason.

IX

Complete this section if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

1. MANIFEST REQUIREMENTS

	Yes	No	NI*	Remarks
(A) Does the operator have copies of the manifest available for review?	<input checked="" type="checkbox"/>	_____	_____	_____
(B) Do the manifest forms reviewed contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements)				
1. Manifest document number?	<input checked="" type="checkbox"/>	_____	_____	_____
2. Name, mailing address, telephone number, and EPA ID Number of Generator	<input checked="" type="checkbox"/>	_____	_____	_____

	Yes	No	NI*	Remarks
3. Name and EPA ID Number of Transporter(s)?	<u>X</u>	—	—	_____
4. Name, address, and EPA ID Number of Designated permitted facility and alternate facility?	<u>X</u>	—	—	_____
5. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	<u>X</u>	—	—	_____
6. The total quantity of waste(s) and the type and number of containers loaded?	<u>X</u>	—	—	_____
7. Required certification?	<u>X</u>	—	—	_____
8. Required signatures?	<u>X</u>	—	—	_____
(C) Does the owner or operator submit exception reports when needed?	<u>X</u>	—	—	_____

2. PRE-TRANSPORT REQUIREMENTS

(A) Is waste packaged in accordance with DOT Regulations? (Required prior to movement of hazardous waste off-site)	<u>X</u>	—	—	_____
(B) Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required to movement of hazardous waste off-site)	<u>X</u>	—	—	_____
(C) If required, are placards available to transporters of hazardous waste?	<u>X</u>	—	—	_____

REMARKS

Use this section to briefly describe site activities observed at the time of the inspection. Note any possible violations of Interim Status Standards.

For the most part, the facility appears to be in compliance with Ohio's Hazardous Waste Regulations, Chapter 3745-CAC. However, there were a number of minor violations:

1. No waste analysis plan prepared as specified in 3745-55-13;
2. Training records not specific regarding description of training, see 3745-55-16;
3. Contingency Plan does not include specific remedial measures facility personnel should take in response to a minor incident - 3745-55-52;
4. Records do not include quantity or date of storage of hazardous waste as required by 3745-55-73;
5. Cost estimate for closure not specific regarding amounts of waste; see 3745-56-32.

Thomas K. Wiley
7/26/81

HWFAB # 03-74-0354

U.S. EPA I.D. # OHDOOD/16-7219

Facility: Unica Carbide Corp. Address: 200 North St / POB J

City: Foster

State: Ohio Zip Code: 44830 County: Seneca Telephone: 419-435-8181

INSPECTION PARTICIPANTS(S)

	(Name)	(Title)	(Telephone)
1.	Carl Reiter	Env. Coordinator	419-435-8181
2.	Clayton Niederthal	Chief Engineer	"
3.	Bill O'Hagan	Assistant Plant Mgr	"

	INSPECTOR(S)	
1.	Stanet W. Badden	Chazafclauski, Chase Scientist 419-352-8461
2.		
3.		

INSTALLATION ACTIVITY

If the site is a TSDF, check the boxes indicating which regulations are applicable.

Mark One

Generator only (G)

☒ General Facility Standards, Preparedness and Prevention, Contingency and Emergency, Manifests/Records/Reporting, Closure

Waste Piles S03

Transporter (T)

and Prevention, Contingency and Emergency, Manifests/Records/Reporting, Closure

Land Treatment D81

☐ TSDF only

☒ Containers 501

☐ Landfills D80

G-T

Tanks S02/T01

Chemical/Physical/
Biological T04

☒ G-TSDF

Surface Impoundments S04/T02

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T-TSDF

Incineration/Thermal Treatment

Groundwater Monitoring

G-T-TSDF

Post-Closure

RCRA INTERIM STATUS INSPECTION FORM

1. Has the facility submitted a Part A to Ohio?
2. If "yes", is it complete and accurate?
3. Has the facility submitted a Part B?

<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

REMARKS, PART 1. GENERAL INFORMATION
Include a brief description of site activity and waste handling.

Union Carbide Corp. Carbon Products Div. manufactures carbon and graphite products e.g. battery electrodes, an. carbons, bush blocks, flexible carbon & graphite blocks.

Hazardous waste activity includes:

Storage exclusively in containers (8800 gal);

<p>Part A F001 - 22,000#/yr (T) F002 - 54,000#/yr (T) F008 - 9000#/yr (K,T) on salts D008 - 10,000#/yr Ph</p>	<p>Annual Report 1982 F001 Trichloroethylene 131,769 # to Commercial Oil F002 Trichloroethylene 45,254 # to Chem Solvents Grading it W228</p>
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W002 Acetone (I) Lab waste potential
 W013 (Acetone) Men RCR A
 W211 Carbon Tetrachloride (T) Lab waste potential
 W135 Trichloroethylene (I) Lab waste potential
 W220 Trichloroethylene (T) Lab waste potential
 W228 Trichloroethylene (T) Spill potential
 W239 Xylene (T) Lab waste potential
 No generation of F008, D008
 Apr 1982:

RCRA INTERIM STATUS INSPECTION FORM

PART 2. GENERATOR REQUIREMENTS

	Yes	No	N/A	Remark #
1. The hazardous waste(s) generated at this facility have been tested or are acknowledged to be hazardous waste(s) as defined in Section 261 and in compliance with the requirements of Sections 262.11.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Does this facility generate any hazardous wastes that are excluded from regulation under Section 261.4 (statutory exclusions) or Section 261.6 (recycle/reuse)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>solvents</u>
3. Does this facility have waste or waste treatment equipment that is excluded from regulation because of totally enclosed treatment (Section 265.1(c)(9)) or via operation of an elementary neutralization unit and/or wastewater treatment unit (Section 265.1(c)(10)).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. The generator meets the following requirements with respect to the preparation, use and retention of the hazardous waste manifest:				
a) The manifest form used contains all of the information required by Section 262.21(a) and (b) and the minimum number of copies required by Section 262.22.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) The generator has designated at least one permitted disposal facility and has/will designate an alternate facility or instructions to return waste in compliance with Section 262.20.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Part 1</u>
c) Prepared manifests have been signed by the generator and initial transporter in compliance with Section 262.23.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d) The generator has complied with manifest exception reporting requirements (investigate after 35 days, report after 45 days) in Section 262.42(a), (b)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e) Signed copies of all hazardous waste manifests and any documentation required for Exception Reports are retained for at least 3 years as required by Section 262.40.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

RCRA INTERIM STATUS INSPECTION FORM

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
5. The generator meets the following hazardous waste pre-transport requirements:				
a) Prior to offering hazardous wastes for transport off-site the waste material is packaged, labeled and marked in accord with applicable DOT regulations (Section 262.30, 262.31 and 262.32(a))	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Prior to offering hazardous wastes for transport off-site each container with a capacity of 110 gallons (416 liters) or less is affixed with a completed hazardous waste label as required by Section 262.32(b).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) The generator meets requirements for properly placarding or offering to properly placard the initial transporter of the waste material in compliance with Section 262.33.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Hazardous wastes imported from or exported to foreign countries are handled in accordance with the requirements of Section 262.50.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. If the generator elects to store hazardous waste on-site in <u>containers or tanks for 90 days or less</u> without a RCRA storage permit as provided under Section 262.34, the following requirements with respect to such storage are met:				
a) The containers are clearly marked with the words "Hazardous Waste".	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) The date that accumulation began is clearly marked on each container.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. The generator has provided a Personnel Training Program in compliance with Section 265.16(a)(b)(c) including instruction in safe equipment operation and emergency response procedures, training new employees within 6 months and providing an annual training program refresher course (Section 262.34).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. The generator keeps all of the records required by Section 265.16(d)(e) including written job titles, job descriptions and documented employee training records (Section 262.34).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

RCRA INTERIM STATUS INSPECTION FORM

NOTE : SHORT-TERM STORAGE FOR 90 DAYS OR LESS IN TANKS AND CONTAINERS ALSO REQUIRES THAT REGULATIONS IN SECTION 265, SUBPARTS C AND D (PREPAREDNESS AND PREVENTION PLUS CONTINGENCY AND EMERGENCY) AND CERTAIN PORTIONS OF THE "CONTAINERS" AND "TANKS" RULES BE MET. COMPLETE THE APPROPRIATE SECTIONS OF THE INSPECTION FORM.

REMARKS, PART 2. GENERATOR REQUIREMENTS

RCRA INTERIM STATUS INSPECTION FORM

PART 4. GENERAL INTERIM STATUS REQUIREMENTS

SUBPARTS INCLUDED

B: General Facility Standards	D: Contingency and Emergency	G: Closure
C: Preparedness and Prevention	E: Manifest/Records/Reporting	H: Financial Requirements

Subpart B: General Facility Standards

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
1. The operator has a detailed chemical and physical analysis of the waste material containing all of the information which must be known to properly treat or store the waste as required by Section 265.13(a)(1).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	#1
2. The operator has a written waste analysis plan which describes analytical parameters, test methods, sampling methods, testing frequency and responses to any process changes that may affect the character of the waste (Section 265.13(b)).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. a) Physical contact with the waste structures or equipment will not injure unknowing/unauthorized persons or livestock entering the facility (265.14(a)(1)).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b) Disturbance of the waste will not cause a violation of the hazardous waste regulations (265.14(a)(2)).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IF BOTH 3a AND 3b ARE "YES", MARK QUESTIONS 4 AND 5 "NOT APPLICABLE".				
4. The facility has -				
a) A 24-hour surveillance system, <u>or</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) An artificial or natural barrier <u>and</u> a means to control entry at all times (265.14(b)(2)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

- [illegible]

RCRA INTERIM STATUS INSPECTION FORM

Subpart C: Preparedness and Prevention

	Yes	No	N/A	Remark #
1. Has there been a fire, explosion or non-planned release of hazardous waste at this facility? (265.31)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	#3
2. If required due to actual hazards associated with the waste material, the facility has the following equipment: (265.32)				
a) Internal alarm system.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Access to telephone, radio or other device for summoning emergency assistance.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Portable fire control equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Water at adequate volume and pressure via hoses sprinkler, foamers or sprayers.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. All required safety, fire and communications equipment is tested and maintained as necessary; testing and maintenance are documented. (265.33)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. If required due to the actual hazards associated with the waste material, personnel have immediate access to an emergency communication device during times when hazardous waste is being physically handled. (265.34)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. If required due to the actual hazards associated with the waste material, adequate aisle space to allow unobstructed movement or emergency or spill control equipment is maintained. (265.35)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. If required due to the actual hazards associated with the waste material, the facility has attempted to make appropriate arrangements with local emergency service authorities to familiarize them with the possible hazards and the facility layout. (265.37(a))	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fire Hospital
7. Where state or local emergency service authorities have declined to enter into any proposed special arrangements or agreements the refusal has been documented. (265.37(b))	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

RCRA INTERIM STATUS INSPECTION FORM

Subpart D: Contingency and Emergency

1. The facility has a written Contingency Plan designed to minimize hazards from fires, explosions or unplanned releases of hazardous wastes (265.51) and contains the following components:

- a) Actions to be taken by personnel in the event of an emergency incident.
 - b) Arrangements or agreements with local or state emergency authorities.
 - c) Names, addresses and telephone numbers of all persons qualified to act as emergency coordinator.
 - d) A list of all emergency equipment including location, physical description and outline of capabilities.
 - e) If required due to the actual hazards associated with the waste(s) handled, an evacuation plan for facility personnel. (265.51(f))
2. A copy of the Contingency Plan and any plan revisions is maintained on-site and has been submitted to all local and state emergency service authorities that might be required to participate in the execution of the plan. (265.53)
3. The plan is revised in response to facility, equipment and personnel changes or failure of the plan. (265.54)
4. An emergency coordinator is designated at all times (on-site or on-call) is familiar with all aspects of site operation and emergency procedures and has the authority to implement all aspects of the Contingency Plan. (265.56)
5. If an emergency situation has occurred, the emergency coordinator has implemented all or part of the Contingency Plan and has taken all of the actions and made all of the notifications deemed necessary under Sections 265.56.

<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RCRA INTERIM STATUS INSPECTION FORM

Yes No N/A Remark #

Subpart E: Manifests/Records/Reporting

NOTE : THE FOLLOWING REQUIREMENTS ARE APPLICABLE TO BOTH ON-SITE AND OFF-SITE TREATMENT, STORAGE AND DISPOSAL FACILITIES.

1. The operator maintains a written operating record at his facility as required by Section 265.73 which contains the following information:

- | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|
| a) Description and quantity of each hazardous waste treated, stored or disposed of within the facility and the date(s) and method(s) pertinent to such treatment storage or disposal. (262.73(b)(1)) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Common name, EPA Hazardous Waste Identification Number and physical state (liquid, solid, gas) of the waste(s). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) The estimated (or actual) weight, volume or density of the waste material(s). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) A description of the method(s) used to treat, store or dispose of the waste(s) using the EPA Handling Codes listed in 45 FR 33252 (May 19, 1980). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) The present physical location of each hazardous waste within the facility. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) <u>FOR DISPOSAL FACILITIES</u> , the location and quantity of each hazardous waste recorded on a map of the facility and cross-references to any pertinent manifest document number(s). (265.73(b)(2)) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Records of any waste analyses and trial tests required to be performed. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Records of the inspections required under Section 265.15 (General Inspection Requirements - Subpart B). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i) Records of any monitoring, testing or analytical data required under other Subparts as referenced by Section 265.73(b)(6). | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Records of Closure cost estimates and Post-Closure (DISPOSAL ONLY) cost estimates required under Subpart G. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

RCRA INTERIM STATUS INSPECTION FORM

2. The operators has submitted an annual Treatment-Storage-Disposal Operating Report (by March 1) containing all of the operating information required under Section 265.75.

Yes No N/A Remark #

☒ ☐ ☐ _____

NOTE : THE FOLLOWING REQUIREMENTS ARE APPLICABLE TO ONLY OFF-SITE TREATMENT, STORAGE AND DISPOSAL FACILITIES.

3. Manifests received by the facility are signed and dated; one copy is given to the transporter, one copy is sent to the generator within 30 days and one copy is kept for at least 3 years. (265.71)

☒ ☐ ☐ _____

- a) If shipping papers are used in lieu of manifests (bulk shipments, etc.) the same requirements are met. (265.71)(b)

☐ ☐ ☒ _____

- b) Any significant discrepancies in the manifest, as defined in Section 265.72(a) are noted in writing on the manifest document. (265.71(a)(2))

☐ ☐ ☒ _____

4. Any manifest discrepancies have been reconciled within 15 days as required by Section 265.72(b) or the operator has submitted the required information to the Regional Administrator/Director.

☐ ☐ ☒ _____

5. If the facility has accepted any unmanifested hazardous wastes from off-site sources (except from small quantity generators) for treatment, storage, or disposal an unmanifested waste report containing all the information required by Section 265.76 has been submitted to the Regional Administrator/Director within 15 days.

☐ ☐ ☒ _____

Subpart G: Closure and Post-Closure

NOTE : THE FOLLOWING REQUIREMENTS ARE APPLICABLE TO BOTH DISPOSAL AND NON-DISPOSAL FACILITIES.

1. A written Closure Plan is on file at the facility and contains the following elements: (Section 265.112)

☒ ☐ ☐ _____

- a) A description of how and when the facility will be closed. (265.112(a)(1)).

☒ ☐ ☐ _____

RCRA INTERIM STATUS INSPECTION FORM

<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

b) A description of how any of the applicable closure requirements in other Subparts of Section 265 (Tanks, Surface Impoundments, Landfill, etc.) will be carried out.

c) An estimate of the maximum amount of hazardous wastes being treated or in storage at the facility. (NOTE: Maximum inventory should agree with the permit.)

d) A description of steps taken to decontaminate facility equipment.

e) The year closure is expected to begin and a schedule for the various phases of closure.

2. The Closure Plan has been amended within 60 days in response to any changes in facility design, processes or closure dates.

3. The Closure Plan has been submitted to the Regional Administrator/Director 180 days prior to beginning the Closure process.

Subpart H: Financial Requirements

1. The owner or operator of the facility has established financial assurance for closure by use of one of the following: (265.143)

a) A closure trust fund, or

b) A surety bond, or

c) A closure letter of credit, or

d) A combination of financial mechanisms.

NOTE : COMPLIANCE WITH THESE REGULATIONS IS A FEDERAL REQUIREMENT.

Appropriate Assurance
compliance
assurances
to plant
specifically
to plant

*Have them to find
 send to P. King*

RCRA INTERIM STATUS INSPECTION FORM

2. A written cost estimate for closure of the facility (as specified in the closure plan) is available.

<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS, PART 4. GENERAL INTERIM STATUS REQUIREMENTS

- #1 Trichloroethylene safety data sheets.
- #2 None to date. Some Ignitables on permit, but not generated.
- #3 Small amount of Hg. Contacted WDD about this.

RCRA INTERIM STATUS INSPECTION FORM

PART 5. TREATMENT/STORAGE/DISPOSAL

SUBPARTS INCLUDED

I: Management of Containers	L: Waste Piles	0: Incinerators
J: Management of Tanks	M: Land Treatment	P: Thermal Treatment
K: Surface Impoundments	N: Landfills	Q: Chemical/Physical/Biological Treatment

Subpart I: Management of Containers

	Yes	No	N/A	Remark #
1. Hazardous wastes are stored in containers which are:				
a) Closed (265.173)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) In good physical condition (265.171)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Compatible with the wastes stored in them (265.172)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Containers are stored closed except when it is necessary to add or remove wastes. (265.173(a))	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Hazardous waste containers are not stored, handled or opened in a manner which may rupture the container or cause it to leak. (265.173(b))	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. The area where containers are stored is inspected for evidence of leaks or corrosion at least weekly and such inspections are documented. (265.174)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Containers holding Ignitable or Reactive waste(s) are located at least 50 feet (15 meters) from the property line and the general requirements for handling such wastes in Section 265.17 (physical separation, signs and safety) are met (265.176).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Containers holding hazardous wastes are never stored near other materials which may interact with the waste in a hazardous manner. (265.177(c))	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Environmental and Geotechnical Services

[illegible]

[illegible]

02-Mar-89

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

< = LESS THAN

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED.

SAMPLE SOURCE	SAMPLE #	DATE	LAB	DEPTH	FLASH POINT	pH	ARSENIC	BARIUM	CADMIUM	CHROMIUM	LEAD	MERCURY	SELENIUM	SILVER
SOIL #4	S-4	11/29/88	AQUA	0-6 in			3.0	35.0	0.4	7.0	24.0	<0.2	<3.0	0.4

[illegible]

[illegible]

[illegible]

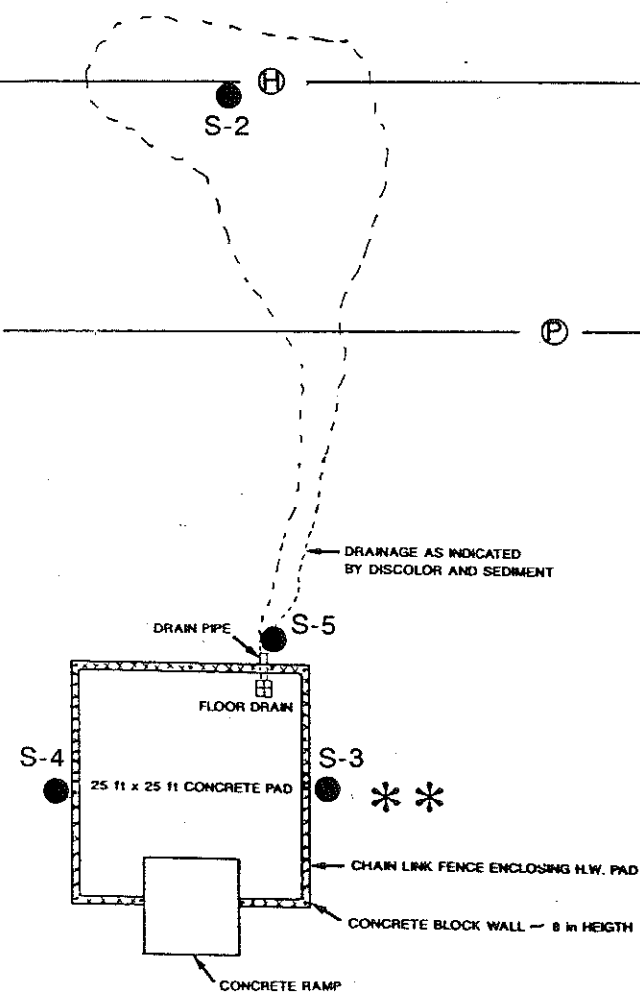
[illegible]

02-Mar-89

[illegible]

TA GLEASON ASSOCIATES' interpretations, conclusions and recommendations relative to this data are limited to our written reports.

S-1



LEGEND

- S-3 ● SOIL SAMPLING POINTS
- ⊕ HIGH-TENSION TOWER
- E OVERHEAD ELECTRIC LINE
- x-x-x FENCE
- Ⓟ POWER POLE
- * TEST WELL

November 29, 1988 Sampling Results					
	S-1 ppm	S-2 ppm	S-3 ppm	S-4 ppm	S-5 ppm
TOTAL VOC	.012	.030	.047	.013	224
ARSENIC	11	74	2	3	8
BARIUM	73	110	20	35	36
CADMIUM	0.8	1	0.9	0.4	0.6
CHROMIUM	8	23	8	7	6
LEAD	49	200	18	24	74
MERCURY	<0.4	<0.2	<0.3	<0.2	0.15
SELENIUM	<2	<3	<3	<3	<3
SILVER	0.8	1	0.9	0.4	0.6

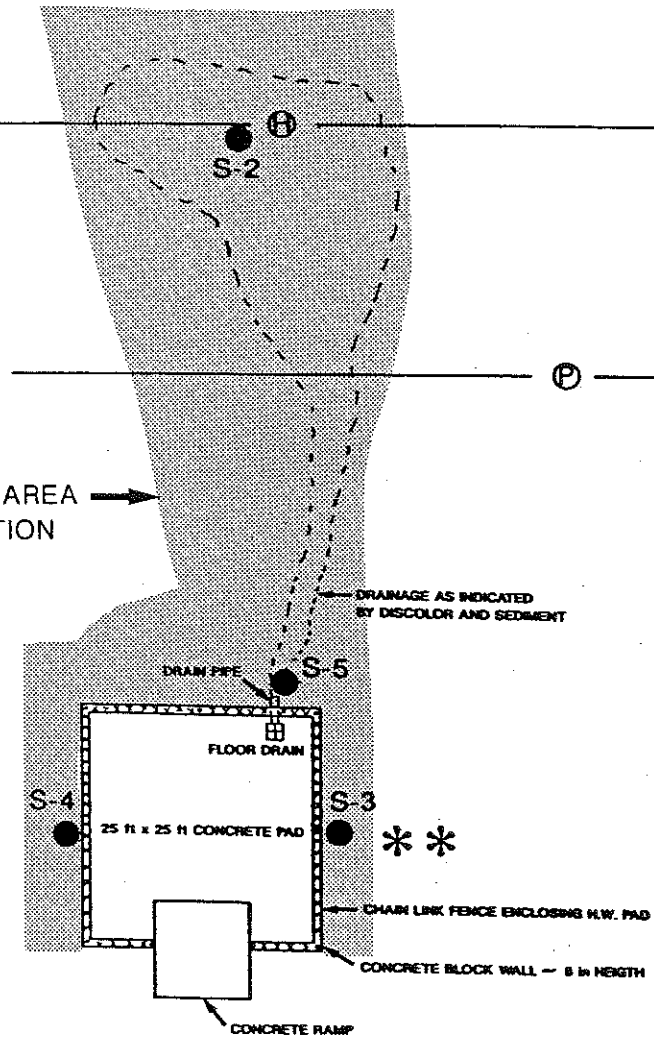
NATIONAL ELECTRIC CARBON
REMEDIAL INVESTIGATION
FOSTORIA, OHIO

FIGURE 1
HAZARDOUS WASTE
STORAGE AREA

ta gleason
associates
Environmental and Geotechnical Services

TA GLEASON ASSOCIATES' interpretations, conclusions and recommendations relative to this data are limited to our written reports.

PROPOSED AREA
OF EXCAVATION



LEGEND

- S-3 ● SOIL SAMPLING POINTS
- ⊕ HIGH-TENSION TOWER
- E — OVERHEAD ELECTRIC LINE
- x x x FENCE
- ⊙ POWER POLE
- * TEST WELL



NORTH
SCALE: 1 in = 20 ft

NATIONAL ELECTRIC CARBON

REMEDIAL INVESTIGATION

FOSTORIA, OHIO

FIGURE 2

HAZARDOUS WASTE STORAGE

AREA & PROPOSED AREA

OF EXCAVATION

f a gleason

associates

Environmental and Geotechnical Services

**D. Corrective
Action**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

*Rec'd 11/9/92
Compliance*

REPLY TO THE ATTENTION OF:

HRE-8J

November 5, 1992

Mr. Mike Wentzel
National Electrical Carbon Corp.
200 North Town Street
Fostoria, OH 44830

Re: Visual Site Inspection
National Electrical Carbon Corp.
Fostoria, Ohio
OHD 004 167 219

Dear Mr. Wentzel:

As indicated in the letter of introduction sent to you on June 9, 1992, the U.S. Environmental Protection Agency is enclosing a copy of the final Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the referenced facility. The executive summary and conclusions and recommendations sections have been withheld as Enforcement Confidential.

If you have any questions, please call Francene Harris at (312) 886-2884.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "KMP".

Kevin M. Pierard, Chief
Minnesota/Ohio Technical Enforcement Section
RCRA Enforcement Branch

HRE-8J

April 21, 1994

Mr. Ralph Baker
Ohio Environmental Protection Agency
Northwest District Office
347 North Dunbridge Road
Bolwing Green, Ohio 43402

RECEIVED
WMD RECORD CENTER

APR 25 1994

Re: PA/VSI
National Electric Carbon Corp.
OHD 004 167 219

Dear Mr. Baker:

Per your request, enclosed is a copy of the Preliminary Assessment/Visual Site Inspection for the referenced facility. The Executive Summary and Conclusions and Recommendations sections are "enforcement confidential" and should not be released to the public.

If you have any questions, please contact me at (312) 886-2884.

Sincerely yours,

Francene D. Harris
Technical Enforcement Section #1
RCRA Enforcement Branch

Enclosure

HRE-8J\FHARRIS\fh\6-2884\PA\VSI\PAREQUES\BAKER.LTR\April 21, 1994


OFFICIAL FILE COPY

CONCURRENCE REQUESTED FROM REB			
SEC/BR SECRTRY			
OTHER STAFF	REB STAFF	REB SECTION CHIEF	REB BRANCH CHIEF
	JFH 4/21/94		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

DATE: APR 14 1994

SUBJECT: Justification for Withholding Executive Summary and Conclusions
and Recommendations Sections of the Preliminary Assessment/Visual
Site Inspection

FROM: Kevin M. Pierard, Chief 
Technical Enforcement Section #1
RCRA Enforcement Branch

TO: File

The "Executive Summary" and "Conclusions and Recommendations" sections of the Preliminary Assessment/Visual Site Inspection (PA/VSI) are being withheld as enforcement confidential. This decision is based upon the Freedom of Information Act (FOIA) 5 U.S.C. §552. These sections are excluded based on exemptions 5 U.S.C. §552(b)(5), which state that the PA/VSI is a "predecisional, deliberative document" and 5 U.S.C. §552(b)(7)(A), "disclosure could reasonably interfere with enforcement proceedings".

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118



**PRELIMINARY ASSESSMENT/
VISUAL SITE INSPECTION**

**NATIONAL ELECTRICAL CARBON CORPORATION
FOSTORIA, OHIO
OHD 004 167 219**

FINAL REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460**

Work Assignment No.	:	C05087
EPA Region	:	5
Site No.	:	OHD 004 167 219
Date Prepared	:	October 16, 1992
Contract No.	:	68-W9-0006
PRC No.	:	009-C05087OH6P
Prepared by	:	PRC Environmental Management, Inc. (Pete Zelinskas)
Contractor Project Manager	:	Shin Ahn
Telephone No.	:	(312) 856-8700
EPA Work Assignment Manager	:	Kevin Pierard
Telephone No.	:	(312) 886-4448

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- A EPA PRELIMINARY ASSESSMENT FORM 2070-12
- B VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS
- C VISUAL SITE INSPECTION FIELD NOTES

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RELEASED

DATE

RIN #

INITIALS

EXECUTIVE SUMMARY

ENFORCEMENT
CONFIDENTIAL

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the National Electrical Carbon Corporation (NECC) facility in Fostoria, Ohio. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritizing RCRA facilities for corrective action.

The NECC facility occupies about 46 acres and is used for the production of carbon and graphite products. The facility has continually expanded over the years; however, carbon and glass manufacturing have occurred since it was established in 1892. Union Carbide (UC) operated the facility from 1917 to late 1986 when the property was sold to Morgan Crucible. Morgan Crucible operates the facility under the name National Electrical Carbon Corporation and has about 190 employees.

In 1980, UC filed a Part A permit application identifying the facility as a treatment, storage or disposal (TSD) facility with storage of waste in drums (SWMU 7). In 1988, during closure activities at SWMU 7, soil and ground water contamination was detected. However, OEPA granted NECC a status change in 1991 to RCRA-generator of hazardous waste with less than 90-day storage. The facility generates a variety of waste solvents and solvent contaminated materials, wastewater, nonhazardous carbon dust and lead-contaminated carbon dust, waste plating filters, waste oils and hydraulic fluids, empty drums, waste carbon, and metallic debris.

The PA/VSI identified the following nine SWMUs and six AOCs at the facility:

Solid Waste Management Units

1. Satellite Accumulation Areas
2. Baghouses
3. Hazardous Waste Storage Area
4. Empty Drum Storage Area
5. Waste Oil Storage Area
6. Debris Collection Area
7. Former Hazardous Waste Storage Area
8. Ground-Water Treatment System
9. Old Drum Storage Area

Areas of Concern

1. Building Nos. 72 and 77 Spill Area
2. Building No. 4 Spill Area
3. Tank Field
4. Fuel Oil UST
5. Excavated TCE USTs
6. NECC Facility

ENFORCEMENT
CONFIDENTIAL

RELEASED

DATE

RIN #

INITIALS

The nearest drinking water wells are located in a residential area about 1,000 feet northeast of the facility. City water is available to all residences in this area; however, some are still supplied by ground-water from the bedrock aquifer. The wells are not directly downgradient from the facility. Fostoria uses five man-made reservoirs supplied by water from the East Branch of the Portage River for municipal water. The closest reservoir to the facility is about 1.2 miles southwest. The facility does not have an National Pollutant Discharge Elimination System (NPDES) permit. The potential for the facility to release to surface water is low.

Area residents occasionally complain about sulfur dioxide emissions from the facility, however no regulatory violations for air releases have been documented. NECC has 52 air permits. The potential for the facility to release to air is low. Contamination problems at the facility are related to on-site soils and ground water. The potential for all SWMUs to release to surface water is low.

Releases to on-site soils and ground water have occurred in three areas. During closure of a Former Hazardous Waste Storage Area (SWMU 7), trichloroethylene (TCE) contamination was detected in soils and ground water. A plan for landfill closure and post-closure care for the unit has been approved by Ohio Environmental Protection Agency (OEPA). TCE has also been detected in the vicinity of Building Nos. 72 and 77 (AOC 1). In the vicinity of Building No. 4 (AOC 2), 1,2-dichloroethane has been detected in ground water. A ground-water recovery system that discharges to a Ground-Water Treatment System (SWMU 8) has been in operation at AOC 1 since 1989; modifications to the recovery system will be installed by November 1992 to broaden the recovery range of the AOC 1 area and to recover ground water from the SWMU 7 area. OEPA is skeptical that the recovery system will adequately collect contaminated ground-water from the two areas and will dictate further action for the areas after reviewing sampling results. A recovery system will also be installed in the vicinity of Building No. 4. OEPA will also dictate further action at this location. PRC recommends that remediation continue and that OEPA continue to review monitoring reports of future sampling.

Other major concerns at the facility include the Old Drum Storage Area (SWMU 9) and the Tank Field (AOC 3), both of which have a high potential for release to ground water. Because little investigative work has been performed, PRC recommends that soil and ground water be sampled near these areas.

SWMUs 4, 5, and 6 are lacking adequate containment for preventing releases. The Fuel Oil UST (AOC 4) has a low to moderate potential to release to on-site soils and ground water. A tightness test should be performed on the unit. To detect releases from the Excavated TCE USTs (AOC 5), wells in the vicinity of AOC 5 should be monitored to determine if a source for TCE is present.

PRC considers the entire NECC facility an AOC because industrial activity has been occurring since the late 1800s, and because several releases to ground-water have occurred. Residential wells northeast of the facility should be immediately sampled. Given waste management practices during most of this century, hazardous releases from unidentified sources at the facility may have occurred and may be continuing. The facility's history and past waste management practices should be further investigated. An information gathering effort of this magnitude is beyond the scope of a PA/VSI.

RELEASED
DATE 2/2/00
RIN # 11
INITIALS CMV

ENFORCEMENT
CONFIDENTIAL

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has usually exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining additional information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the National Electrical Carbon Corporation (NECC) facility (EPA Identification No. OHD 004 167 219) in Fostoria, Seneca County, Ohio. The PA was completed on June 10, 1992. PRC gathered and reviewed information from the Ohio Environmental Protection Agency (OEPA) and from EPA Region 5 RCRA files, the U.S Department of Agriculture (USDA), the Ohio Department of Natural Resources (ODNR), and the U.S. Geological Survey (USGS). The VSI was conducted on June 15, 1992. It included interviews with facility representatives and a walk-through inspection of the facility. PRC identified nine SWMUs and six AOCs at the facility.

PRC completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included as Attachment A. The VSI is summarized and 14 inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C.

2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; a history of documented releases; regulatory history, environmental setting; and receptors.

2.1 FACILITY LOCATION

The NECC facility is located in Fostoria, Seneca County, Ohio (latitude 41°09'34"N, longitude 83°24'60"W) (see Figure 1). It is bordered to the north by Ohio Power, to the east by farmland, and to the south and west by private residences.

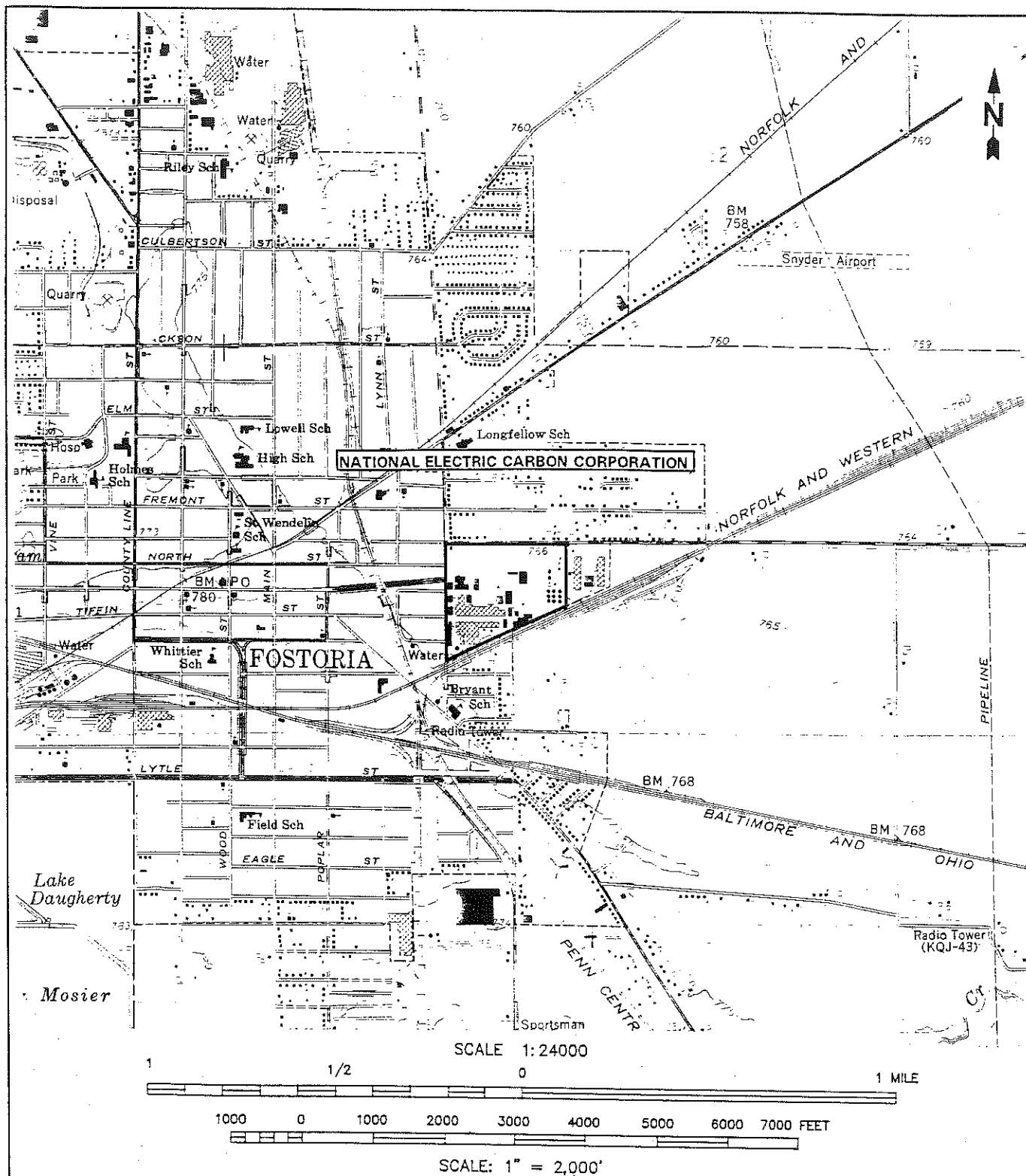
2.2 FACILITY OPERATIONS

NECC occupies about 46 acres. The facility covered about 70 acres until 1989 when a number of buildings at the east end of the site were sold to Robbinsville Development Limited (RDL) (see Figure 2). NECC and RDL are currently involved in a legal disagreement concerning ownership of the property sold to RDL.

The facility has constantly expanded over the years; however, carbon and glass manufacturing have occurred at the facility since it was established by J.B. Crouse and H.H. Tremaine in 1892. In 1899, the National Carbon Company purchased the facility and then sold it to Union Carbide (UC) in 1917. UC operated at the facility until late 1986, when the property was sold to Morgan Crucible. Morgan Crucible operates the facility under the name National Electrical Carbon Corporation. The facility representative could supply little information concerning the facility's early years of operation. The facility has 190 employees and operates three shifts 5 days per week, 24 hours per day.

NECC manufactures various carbon and graphite products including the following:

- Electric motor brushes
- Graphite rods for industrial diamond manufacturing
- Carbonized and graphitized rayon and felt
- Lighting carbon
- Heat exchange pipe



QUADRANGLE LOCATION

Source: Modified From USGS, Fostoria, Quadrangle,
Photorevised 1972.

NATIONAL ELECTRIC CARBON CORPORATION
FOSTORIA, OHIO

FIGURE 1 FACILITY LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

al Street



AOC 3

U 3

SWMU 4

SWMU 6

SWMU 9 I

AOC 4

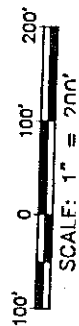
Western Railroad

Solid Waste Management Units

- | | |
|--------------------------------|---------------------------------------|
| 1 Satellite Accumulation Areas | 5 Waste Oil Storage Area |
| 2 Baghouses (not shown) | 6 Debris Collection Area |
| 3 Hazardous Waste Storage Area | 7 Former Hazardous Waste Storage Area |
| 4 Empty Drum Storage | 8 Ground-Water Treatment System |
| | 9 Old Drum Storage Area |

Areas of Concern

- | | |
|--------------------------------------|----------------------|
| 1 Building Nos. 72 and 77 Spill Area | 4 Fuel Oil UST |
| 2 Building No. 4 Spill Area | 5 Excavated TCE USTs |
| 3 Tank Field | 6 NECC Facility |



- Carbon mechanical seals
- Filtration media

Raw materials used at the facility include coal tar pitch, coke particles, natural graphite, and extrusion oils. Raw materials are stored in various warehouses throughout the facility. The manufacturing process consists of raw material sizing and blending, pressing and extruding materials, baking, and finishing (NECC, 1992).

PRC identified nine SWMUs and six AOCs at the NECC facility. The SWMUs are listed in Table 1.

2.3 WASTE GENERATION AND MANAGEMENT

NECC generates a variety of waste solvents and solvent contaminated materials, wastewater, nonhazardous carbon dust and lead-contaminated carbon dust, waste plating filters, waste oils and hydraulic fluids, empty drums, waste carbon, and metallic debris (NECC, 1992). Wastes generated at the facility are listed in Table 2.

Waste trichloroethylene (TCE) (F001) and TCE debris (D040) is generated from a scouring unit used to degrease rayon-based cloth in Building No. 77. The waste TCE materials are stored in a Satellite Accumulation Area (SAA) (SWMU 1) in separate 55-gallon drums. When full, the drums are transferred to the Hazardous Waste Area (SWMU 3) and are eventually removed from the facility by Chemical Solvents, Inc., in Cleveland, Ohio for reclamation or disposal. NECC generates about 31,000 pounds of these waste materials per year.

Waste solvents are generated at NECC from a small testing laboratory, disposal of off-specification materials, and parts cleaners. NECC uses a small testing laboratory at the west end of the facility for quality control of carbon products. Waste solvents, including waste acetone (D001 and F003), waste xylene (D001 and F003), and waste toluene (D001 and F005) result from the cleaning of testing equipment and materials to be tested. The waste materials are accumulated in an SAA (SWMU 1) below the testing laboratory and eventually moved to SWMU 3. The solvents are removed from the facility to Petro-Chem, Inc. (Petro-Chem), in Detroit, Michigan for reclamation. NECC generates about 3,500 pounds of the materials annually.

TABLE 1
SOLID WASTE MANAGEMENT UNITS

<u>SWMU Number</u>	<u>SWMU Name</u>	<u>RCRA Hazardous Waste Management Unit^a</u>	<u>Status</u>
1	Satellite Accumulation Areas	No	Active
2	Baghouses	No	Active
3	Hazardous Waste Storage Area	No	Active
4	Empty Drum Storage area	No	Active
5	Waste Oil Storage Area	No	Active
6	Debris Collection Area	No	Active
7	Former Hazardous Waste Storage Area	Yes	Inactive -- Closure operations are underway.
8	Ground Water Treatment System	No	Active
9	Old Drum Storage Area	No	Inactive -- it is not known when wastes were last stored in the area. Partial remediation was performed in 1983.

Note:

^a A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.

TABLE 2
SOLID WASTES

Waste/EPA Waste Code ^a	Source	Solid Waste Management Unit ^b
Waste TCE/F001	Scouring unit	1 and 3
TCE-Contaminated Debris/D040	Scouring unit	1 and 3
Waste Acetone/D001	Off-specification materials/testing laboratory	1 and 3
Waste Xylene/F003	Testing Laboratory	1 and 3
Waste Toluene/F005	Testing Laboratory	1 and 3
Waste Furfural Alcohol/D001	Off-specification materials	1 and 3
Waste Diethyl Sulfate/D002	Off-specification materials	1 and 3
Waste Petroleum Naptha/D001, D039	Parts cleaners	None
TCE-Contaminated Ground-Water Filter Media/D040	Trichloroethylene spill area	1 and 3
Wastewater/NA	Trichloroethylene spill area and various sources	8
Waste Carbon Dust/NA	Manufacturing	2 and 4
Lead-Contaminated Carbon Dust/D008	South press	2 and 3
Plating Filters/NA	Plating area	3
Waste Oils and Waste Hydraulic Fluids/NA	Maintenance and machinery lubrication	5
Empty Drums/NA	Process materials	4 and 6
Waste Carbon/NA	Manufacturing	6
Metallic Debris/NA	Manufacturing	6

Notes:

^a Not applicable (NA) designates nonhazardous waste.

^b "None" indicates that the waste stream is not managed on site.

Waste furfural alcohol (D001), waste acetone (F003), and diethyl sulfate (D002) result from material expiration. The waste materials are accumulated in an SAA (SWMU 1) near the generation areas and eventually moved to SWMU 3. The furfural alcohol and acetone are removed to Petro-Chem for reclamation, and the diethyl sulfate is removed to Chemtron in Avon, Ohio for stabilization and is eventually sent to a landfill. NECC generates about 300 pounds per year of each waste.

NECC uses a number of parts cleaners throughout the facility maintained by Safety-Kleen Corporation (Safety-Kleen) based in Toledo, Ohio. Use of the parts cleaners generates waste petroleum naptha (D001) and naptha-contaminated rags (D039). The facility generates about 2,400 pounds per year of waste naptha, which Safety-Kleen removes directly from the parts cleaners and reclaims. Contaminated rags are also removed by Safety-Kleen for solvent removal.

TCE-contaminated wastewater from a TCE spill area (AOC 1) is collected by a Ground-Water Treatment System (SWMU 8) at the north central portion of the facility (see Section 2.4). The extracted ground water is passed through a carbon filtration unit before entering the 7,000-gallon collection tank. When the tank is nearly 75 percent full, NECC analyzes a sample of the wastewater for TCE content. If the TCE content is below 50 parts per billion (ppb), the wastewater is discharged to the Fostoria sanitary sewer. If not, which has yet to occur, the wastewater will be removed from the facility by bulk for treatment. The TCE-contaminated carbon filtration media (D040) is removed twice per year, placed in 55-gallon drums, stored in SWMU 3, and taken to Ross Incineration, in Grafton, Ohio. About 1,400 pounds per year of the waste is generated.

Other sources of wastewater at the facility include sanitary wastewater, noncontact cooling water, and final rinsewater from an occasionally used copper plating line. All wastewater is discharged to the Fostoria sanitary sewer.

NECC generates nonhazardous carbon dust from various manufacturing processes throughout the facility. The dust is accumulated in 1-cubic yard mesh bags at the Baghouses (SWMU 2). NECC has no designated storage area for the dust, although various buildings and the Empty Drum Storage Area (SWMU 4) are used. NECC sells the dust to various industries for use as a heating agent, because of its high British Thermal Unit (Btu) value, and for graphite production. NECC deals with at least 10 dust recycling firms per year. The facility representative could not supply generation figures for the dust.

One carbon press at the facility, in Building No. 19, uses lead as a lubricant. Lead-contaminated carbon dust (D008) is collected by a baghouse (SWMU 2) in 55-gallon drums. Full

drums are stored in SWMU 3 and eventually taken to Chemical Services, in Wyandotte, Michigan. The dust undergoes lead extraction treatment and is eventually disposed of at the BFI Landfill in Findlay, Ohio. NECC generates from 25 to 30 drums of the dust per year (PRC, 1992c).

As mentioned above, a light-duty copper plating line is periodically used for copper plating of carbon rods. Wastewater from this operation is passed through filters and discharged to the Fostoria sanitary sewer. The process generates about two 55-gallon drums per year of nonhazardous filters, which are temporarily stored in SWMU 3 and then taken to the EnviroSAFE Industrial Landfill in Oregon, Ohio.

NECC generates about 2,500 gallons per year of waste oils and waste hydraulic fluids from maintenance and lubrication of machinery throughout the facility. The materials are accumulated in 55-gallon drums and transferred to the Waste Oil Storage Area (SWMU 5). The materials are eventually taken to Cousins Waste Control in Toledo, Ohio for reclamation (PRC, 1992d).

Empty drums are generated from raw materials and various chemicals used in NECC's processes. Reusable empty drums are stored at SWMU 4 and eventually removed from the facility by a recycling company. NECC has had difficulty locating a company to remove the drums. During the VSI, PRC estimated that at least 100 empty drums were in the storage area. Unusable (bent or rusted) drums are accumulated in the Debris Collection Area (SWMU 6).

NECC generates various grades of nonhazardous waste carbon and other metallic debris from the carbon manufacturing processes. The materials are stored in the Debris Collection Area (SWMU 6). Depending on their usability, the materials are sold as scrap, sold to a recycler, or disposed of at the Seneca County Landfill in Tiffin, Ohio. NECC could not supply generation rates for these materials.

2.4 HISTORY OF DOCUMENTED RELEASES

This section discusses the history of documented releases to ground water, surface water, air, and on-site soils at the facility.

In February 1985, about 600 gallons of TCE were spilled during the filling of an 8,000-gallon underground storage tank (UST). The UST was located at the west-central portion of the facility, between Building Nos. 72 and 77 (AOC 1). About 200 to 300 gallons of TCE was recovered; the remainder percolated into the surrounding soils. In March 1985, UC submitted to OEPA a Remedial Investigation and Clean-Up Plan for the contaminated area (UC, 1985). Preliminary sampling results revealed that TCE contamination extended beyond the suspected

boundary of the spill area, indicating that one or more prior releases had occurred at UC (OEPA, 1985). Because the contamination boundaries were not defined, OEPA would not approve UC's investigation plan. In 1986, an investigative plan was approved and NECC's contractor, T.A. Gleason & Associates, Inc. (Gleason), excavated contaminated soil, removed the UST, and installed ground-water monitoring wells (B&W, 1991).

In November 1988, during RCRA closure activities at the Former Hazardous Waste Storage Area (SWMU 7), soil sampling around the concrete pad of the unit revealed the presence of volatile organic compounds (VOC) (NECC, 1989a). Gleason excavated the soils to a depth of 1 foot and recovered soil samples from the base of the excavated area. During the excavation, ground water was encountered and sampled. Analyses detected TCE (NECC, 1989b). Gleason immediately proposed a ground-water recovery system to NECC for remediation of the area (NECC, 1990).

In 1988, during the investigation of the TCE spill at Building Nos. 72 and 77 (AOC 1), another area of ground-water contamination was discovered near Building No.4 (AOC 2), at the southwestern portion of the facility. Samples from ground-water monitoring wells installed in the area indicate that the primary contaminant is 1,2-dichloroethane (DCA) (B&W, 1991).

In 1989, NECC's contractor, Bennet & Williams, Inc. (B&W), installed a Ground-Water Treatment System (SWMU 8) at the spill area between Building Nos. 72 and 77 (AOC 1). The system consisted of two 24-inch-diameter sumps extending through the backfill of the UST excavation area. Ground water collected in the sumps is pumped to a carbon adsorption system, and then to the 7,000-gallon collection tank. As mentioned in Section 2.3, if the TCE level of the collected water is below 50 ppb, the water is discharged to Fostoria's sanitary sewer.

An expansion of the Ground-Water Treatment System at Building Nos. 72 and 77 is set for completion by November 1, 1992. The system is designed not only to further address the spill area, but to collect and contain contaminated ground water at the Former Hazardous Waste Storage Area (SWMU 7). OEPA required the latter as part of landfill closure and post-closure activities for SWMU 7 (see Section 2.5).

OEPA is skeptical that the expanded recovery system will adequately collect contaminated ground-water from the two areas. After the system is installed, quarterly ground-water samples will be collected from nearby monitoring wells to assess the system's performance. OEPA Division of Ground Water (DGW) will review the sampling results and dictate further action at the facility (PRC, 1992e).

Also by November 1, 1992, four ground-water recovery sumps will be installed near Building No. 4. Ground water will be pumped to aeration trays, and air will be blown through the water, to remove the contaminants. Treated ground water will be analyzed for DCA and TCE. If levels are below 50 ppb, the water will be discharged to the sanitary sewer. If the level is above 50 ppb, the water will be removed by bulk from the facility for treatment. As with the expanded ground-water recovery system, OEPA DGW will review results of ground-water sampling and dictate further action for this area (PRC, 1992e).

2.5 REGULATORY HISTORY

In August 1980, UC filed a Notification of Hazardous Waste Activity form with EPA. In November 1980, the company filed a Part A permit application as a treatment, storage, or disposal facility (TSDF) with hazardous waste storage in drums (S01) (SWMU 7). Operations involved the manufacturing of carbon and graphite products. Wastes listed on the application included F001, F002, F008, D001, D002, and a variety of U-listed wastes. The application listed 26 air permits and 47 air permits pending registration (UC, 1980).

OEPA RCRA compliance inspections performed at the facility from 1982 through 1984 found minor violations, including no documentation of training and an incomplete contingency plan. UC addressed the problems adequately (OEPA, 1982, 1983, 1984).

In October 1986, NECC informed OEPA that it wished to withdraw its Part A permit application for TSDF status and operate as a generator with less than 90-day storage. In June 1987, NECC submitted a closure plan to OEPA for the Former Hazardous Waste Storage Area (SWMU 7) (NECC, 1987). NECC intended to continue using the unit for less than 90-day storage once closure was complete. OEPA disapproved the closure plan, and NECC submitted a revised version in early 1988 that called for soil sampling around the storage area (NECC, 1988). OEPA approved the revised closure plan in April 1988, and Gleason began closure activities 7 months later (OEPA, 1988).

As detailed in Section 2.4, TCE was discovered in soil and ground water during closure activities. Contaminated soil was removed, and Gleason immediately proposed a ground-water recovery system to remediate the area. NECC, unhappy with the cost of the system, informed OEPA that the company was searching for another contractor to handle the remediation (NECC, 1990).

In August 1990, realizing that clean closure for SWMU 7 was probably unattainable, OEPA requested that NECC submit an amended closure plan providing for landfill closure and post-closure care, including ground-water monitoring (OEPA, 1990). NECC immediately

submitted an amended closure plan that OEPA disapproved in September 1991 (OEPA, 1991a). In November 1991, NECC submitted a closure plan proposing landfill closure and post-closure care for the unit, including ground-water monitoring and the expanded ground-water recovery system. OEPA approved the plan in January 1992. As explained in Section 2.4, OEPA DGW will review quarterly sampling results and dictate further action at the facility.

Although closure of SWMU 7 is not complete, OEPA granted a change in status to NECC in April 1991. The facility is now considered a generator of hazardous waste with less than 90-day storage (OEPA, 1991b).

NECC does not possess an National Pollution Discharge Elimination System (NPDES) permit. The facility has a wastewater permit from the City of Fostoria for discharges of sanitary wastewater, noncontact cooling water, wastewater from the Ground-Water Treatment System (SWMU 8), and water from an occasionally used copper plating line. NECC must sample water from the ground-water extraction holding tank for TCE content before it is discharged (NECC, 1992). NECC samples wastewater from the plating line filtration system, prior to discharge to the sanitary sewer, every 6 months for heavy metals.

NECC has 52 air permits mainly covering the dust collectors, various stack emissions, emissions from carbon saws, and induction baking systems. No documented releases were found in either EPA Region 5 or OEPA files. The facility representative indicated that NECC received occasional complaints from area residents concerning sulfur dioxide releases, however no releases have been documented.

Two USTs remain at the facility. Four USTs have been removed (see AOCs 4 and 5). Because the USTs contained product materials, neither EPA or OEPA were involved with the removals.

2.6 ENVIRONMENTAL SETTING

This section describes the climate; flood plain and surface water; geology and soils; and ground water in the vicinity of the facility.

2.6.1 Climate

The climate in northwestern Ohio consists of cold winters and hot summers. The yearly average temperature is 51°F. The lowest average monthly temperature is 19.3°F in January. The highest average monthly temperature is 84.2°F in July. Precipitation for northwest Ohio is well distributed throughout the year. Average yearly rainfall for Seneca County is 34.81 inches.

Rainfall peaks in July at 3.80 inches and is at its least in October at 1.95 inches (USDA, 1980). The 1-year, 24-hour maximum rainfall is 2.3 inches, and the average yearly net precipitation is 3.81 inches. The prevailing wind is from the southwest, and the highest average wind speed is 11 miles per hour in March (Todd, 1983).

2.6.2 Flood Plain and Surface Water

The NECC facility does not lie in a 100-year flood plain. The nearest surface water body is a unnamed branch of Wolf Creek, about 4,000 feet south of the facility. Wolf Creek, used mainly for storm water drainage, flows about 15 miles northeast before entering the Sandusky River. The Sandusky River flows north and enters Lake Erie about 15 miles north of its confluence with Wolf Creek. The East Branch of the Portage River (East Branch) lies about 1.25 miles southwest of NECC. The East Branch enters the Portage River about 13 miles northwest of Fostoria. The Portage River flows northeast and enters Lake Erie about 33 miles from its confluence with the East Branch (USDA, 1980; USGS, 1972).

Fostoria uses five man-made reservoirs supplied by the East Branch for municipal water supplies. A sixth reservoir is under construction and will be in use by the end of 1992. The closest reservoir to the facility is about 1.2 miles southwest. Fostoria pumps about 2.7 million gallons per day from the reservoirs (PRC, 1992a).

Storm water from NECC mainly flows to drains throughout the facility that enter the Fostoria storm water sewer system. Storm water sewers in the vicinity of NECC enter the unnamed branch of Wolf Creek. Storm water from the eastern end of the facility is subject to surface infiltration.

2.6.3 Geology and Soils

Seneca County lies on the southeastern edge of the Findlay Arch, a northern extension of the Cincinnati Arch, a large anticline running from Tennessee to Canada. The bedrock in the area is Silurian age dolomitic limestone of the Lockport formation. The dolomitic limestone deposits are a result of massive reef development in inland seas present in the central eastern portion of the United States during the Silurian period (Ausich, 1981). Depth to bedrock in the area is about 31 feet below ground surface. Advance and retreat of the Wisconsin glaciers during the Pleistocene age formed the present day topography and surface soils of Seneca County (USDA, 1980).

Specific geology for the NECC facility was derived from borings performed at the facility during the middle to late 1980s. Generally the geology at the facility consists of the following materials in descending order (UC, 1985; NECC, 1992):

- 0 to 2: Soil and fill material
- 2 to 10 feet: Gray silty clay
- 10 to 16 feet: Gray silty fine sand
- 16 to 30 feet: Gray silty clay
- 30 to 31 feet: Discontinuous sand, gravel, and weathered dolomite (western portion of the facility)
- 31 to 300 feet: Light tan to light bluish gray dolomitic limestone

Soils near the facility belong to the Kibbie-Digby association. Typically, these soils are poorly drained and formed in medium textured to coarse textured sediments (USDA, 1980).

2.6.4 Ground Water

Three aquifers are present in the NECC vicinity. Two aquifers exist in the glacial materials overlying the area bedrock: an upper aquifer in the silty sand unit and a lower aquifer in the discontinuous sand and gravel unit. The water table is at about 10 feet below the ground surface, and ground water flows generally to the northwest (NECC, 1991). The hydraulic conductivity of these glacial aquifers is about 270 feet per year, and recharge is from surface infiltration. The aquifers are regionally considered poor sources of water because of unpredictable availability and high iron levels (ODNR, 1962).

The primary aquifer in the Fostoria area is contained in the dolomitic limestone bedrock and produces up to 1,000 gallons per minute (Todd, 1983). In the NECC vicinity, this aquifer can produce over 100 gallons per minute and has a hydraulic conductivity of about 30 feet per year (NECC, 1992). Ground-water flow in the bedrock aquifer is to the northwest; however, local ground-water flow in this aquifer is influenced by industrial supply wells operated by NECC (screened at 250 feet) and other companies in the area. Ground water, recharged by surface infiltration and ground-water movement from the south, is transported through regional fractures and solution channels formed by the dissolution of carbonate rock. A principal fracture zone occurs in the upper 150 to 175 feet (NECC, 1991). The bedrock aquifer at times contains high amounts of iron and hydrogen sulfide (ODNR, 1962).

The nearest drinking water wells are located in a residential area about 1,000 feet northeast of the facility. The wells are screened in the bedrock aquifer. City water is available to all residences in this area, however, some use ground water. The wells are not directly downgradient from the facility. The City of Fostoria city engineer did not know which or how many of the residences are using ground water (PRC, 1992b). Residences east of the facility also

use ground water. Wells in this area are upgradient from the facility. The City of Fostoria has three municipal water wells, screened at about 180 feet below ground surface, about 1.5 miles northwest of the facility. The wells have been used as a secondary source of drinking water during dry seasons. However, the City of Fostoria is planning to plug the wells (PRC, 1992b).

As detailed in Section 2.4, ground water is contaminated in three areas at the facility.

2.7 RECEPTORS

The NECC facility is located in a mixed industrial and residential area of Fostoria, Ohio. It is bordered to the north by Ohio Power, to the east by farmland, and to the south and west by private residences. The nearest residences are located just across Town Street to the west. Nearly all Fostoria residents live within 1 mile of the facility; the population of Fostoria is about 14,957. The nearest school is 800 feet south of NECC. Area residents have occasionally complained about sulfur dioxide emissions from NECC. The facility is monitored 24 hours per day by security personnel and is surrounded by a 6-foot-high, steel, chain-link fence.

As mentioned in Section 2.6.2, the closest surface water body is Wolf Creek, about 4,000 feet south of the facility. Most storm water from NECC flows directly to Wolf Creek. The East Branch lies about 1.25 miles southeast of NECC. Fostoria uses five man-made reservoirs, supplied by the East Branch, for municipal water supplies. The closest reservoir to the facility is about 1.2 miles southwest. Fostoria pumps about 2.7 million gallons per day from the reservoirs.

As detailed in Section 2.6.4, the nearest drinking water wells are located in a residential area about 1,000 feet northeast of the facility. The wells are not directly downgradient from the facility. The City of Fostoria has three water wells about 1.5 miles northwest of the facility that have been used as a secondary source of drinking water during dry seasons. However, the City of Fostoria is planning to plug the wells (PRC, 1992b). NECC has three on-site industrial wells, all screened at about 250 feet below the ground surface.

There are no sensitive environments within 2 miles of the NECC facility (USGS, 1972).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the nine SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and PRC's observations. Figure 2 shows the SWMU locations.

SWMU 1	Satellite Accumulation Areas
Unit Description:	NECC uses 55-gallon drums for satellite accumulation of various waste solvents throughout the facility. The drums are kept indoors on wooden skids, over solid concrete (see Photograph Nos. 1 and 2). When full, the drums are eventually transferred to the Hazardous Waste Storage Area (SWMU 3).
Date of Startup:	NECC has used satellite accumulation since the early 1970s.
Date of Closure:	The units are active.
Wastes Managed:	Satellite Accumulation Areas are used for the temporary storage of waste solvents, including waste TCE (F001), TCE-contaminated debris (D040), waste acetone (D001), waste furfural alcohol (D001), waste diethyl sulfate (D002), waste xylene (F003), and waste toluene (F005).
Release Controls:	NECC uses 55-gallon drums for satellite accumulation. The drums are kept indoors, on wooden skids, above solid concrete. The drums are monitored regularly.
History of Documented Releases:	No releases from the units have been documented.
Observations:	PRC observed a number of Satellite Accumulation Areas. The units were in sound condition and displayed no spills or stains.

SWMU 2

Baghouses

Unit Description: NECC has about 23 baghouses used mainly to collect nonhazardous carbon dust particles from various manufacturing processes throughout the facility (see Photograph No. 3). Exhaust from processes is channeled into the steel baghouses and passed through filter media that collect the dust particles. The dust particles are then shaken from the filters and collected in 1-cubic-yard mesh bags. NECC has no designated storage area for the dust; however, much of it is stored in the Empty Drum Storage Area (SWMU 4). NECC sells the waste dust to various industries for use as a heating agent, because of its high British Thermal Unit (Btu) value, and for graphite production. NECC deals with at least 10 different dust recycling firms per year. The facility representative could not supply generation figures for the dust.

As mentioned in Section 2.3, one baghouse is used to accumulate lead-contaminated carbon dust. The dust is collected in 55-gallon drums, which are placed in SWMU 3 when full.

Date of Startup: NECC has been using baghouses for dust collection since the early 1960s. Units have been replaced and added over the years.

Date of Closure: The units are active.

Wastes Managed: The units collect nonhazardous and lead-containing, fugitive carbon dust (D008) from various molding processes.

Release Controls: The units are fully enclosed. Dust particles are fed directly into bags or 55-gallon drums.

History of Documented Releases: No releases from the units have been documented.

Observations: During the VSI, PRC observed about 15 of the baghouses. The units appeared to be well-maintained; PRC noted no spilled or leaking dust.

SWMU 3**Hazardous Waste Storage Area****Unit Description:**

The Hazardous Waste Storage Area is located in the middle northern portion of the facility. The unit consists of an aluminum frame building containing a 20- by 12-foot concrete pad (see Photograph No. 4). The pad has a capacity of about 50 drums.

Date of Startup:

The unit was built during the late 1980s.

Date of Closure:

The unit is active.

Wastes Managed:

The unit stores the following hazardous wastes: waste TCE (F001), TCE-contaminated debris and filter media (D040), waste acetone (D001), waste fufural alcohol (D001), waste xylene (F003), waste toluene (F005), and lead-contaminated carbon dust (D008). The unit occasionally stores houses nonhazardous waste plating filters.

Release Controls:

The concrete pad is epoxy-sealed and is surrounded by an 8-inch concrete berm containing a ramp. The pad is completely enclosed in an aluminum building.

**History of
Documented Releases:**

No releases from this unit have been documented.

Observations:

During the VSI, the unit was in sound condition and displayed no severe cracks or stains.

SWMU 4**Empty Drum Storage Area****Unit Description:**

This unit borders the eastern edge of SWMU 3. It consists of an uncovered, unbermed concrete pad measuring about 100 feet by 30 feet, that has a capacity of about 200 drums. Empty drums are brought to the area upside down on skids. NECC also uses this unit for baghouse dust storage (see Photograph No. 5). NECC has had difficulty in finding a removal company for the drums.

Date of Startup:

The unit has been used for empty drum storage since about 1980.

Date of Closure:

The unit is active.

Wastes Managed: The unit stores empty drums and bags of waste carbon dust.

Release Controls: The concrete pad is deteriorating severely and is not covered or bermed. According to the facility representative, the drums are rinsed prior to being placed in the unit.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit contained about 200 empty drums and about 18 bags of carbon dust. The concrete base was highly deteriorated.

SWMU 5 Waste Oil Storage Area

Unit Description: The Waste Oil Storage Area is inside a warehouse at the southern end of the facility. The unit has a concrete base with no defined boundaries (see Photograph No. 6). The warehouse has no floor drains.

Date of Startup: The unit has been used for waste oil storage since the late 1980s. Before this time, NECC had no designated waste oil storage area.

Date of Closure: The unit is active.

Wastes Managed: The unit is used to store nonhazardous waste oils and waste hydraulic fluids.

Release Controls: The unit is indoors on unsealed concrete.

History of Documented Releases: No releases from this unit have been documented.

Observations: The concrete floor is severely cracked. A few minor oil stains were noted on the concrete. The drums were positioned randomly and most of the drums had oil residue on the top.

SWMU 6**Debris Collection Area****Unit Description:**

The Debris Collection Area is located outdoors in the middle eastern portion of the facility. The unit covers 0.5 acre. It consists of four uncovered areas separated by 10-foot concrete walls (see Photograph Nos. 7 and 8). Various grades of waste carbon, scrap metal, and unusable empty drums are stored in each area. The waste carbon materials are removed directly from the process machinery with a front-end loader and placed in the designated portion of the unit. Because the materials are nonhazardous, they remain in the unit indefinitely.

Date of Startup:

The area was built in the mid-1970s.

Date of Closure:

The unit is active.

Wastes Managed:

The unit is used to accumulate various grades of nonhazardous carbon, scrap metal, and unusable drums. The materials are eventually sold as scrap, sold to a recycler, or disposed of at the Seneca County Landfill in Tiffin, Ohio.

Release Controls:

The unit has no release controls; however, no storm water drains are located within 100 feet.

**History of
Documented Releases:**

No releases from this unit have been documented.

Observations:

During the VSI, the unit was in disarray and waste materials were scattered about.

SWMU 7**Former Hazardous Waste Storage Area****Unit Description:**

The Former Hazardous Waste Storage Area is located at the northwestern portion of the facility. The unit consisted of a 25- by 25-foot sealed concrete pad and had a capacity of about 200 55-gallon drums. It was surrounded by an 8-inch concrete berm and a chain-link fence. The unit contained a concrete loading ramp and a valved floor drain at the northeast corner for discharging storm water.

As detailed in Section 2.5, in June 1987, NECC submitted a closure plan to OEPA for the unit to avoid submitting a Part B permit application. Closure began in November 1988. Soil samples from the perimeter of the concrete pad revealed the presence of VOCs. The concrete pad was removed, and ground-water samples were collected, revealing TCE contamination.

NECC has proposed landfill closure and post-closure care for the unit, including ground-water monitoring and an expansion of the ground-water recovery system currently operating in the vicinity of Building Nos. 72 and 77 (AOC 1). The expanded recovery system is expected to be operational by November 1, 1992.

OEPA is skeptical that the expanded recovery system will adequately collect contaminated ground water from the two areas. After the system is installed, quarterly ground-water samples will be collected from nearby monitoring wells to assess the system's performance. OEPA DGW will review the sampling results and dictate further action at the facility.

Date of Startup:	The unit was built in 1980.
Date of Closure:	Closure began in 1988. However, because of ground-water contamination, complete closure has not been accomplished.
Wastes Managed:	The unit was used to store waste TCE (F001), waste furfural alcohol (D001), lead-contaminated carbon dust (D008), waste flammable liquids (D001) (NECC, 1988).
Release Controls:	The unit has been completely excavated (see Photograph No. 9). It consisted of an uncovered, sealed concrete pad surrounded by an 8-inch concrete containment berm and chain-link fence.
History of Documented Releases:	VOCs were detected in soils and ground water near the unit.
Observations:	The unit now consists of leveled gravel.

SWMU 8

Ground-Water Treatment System

Unit Description:

The Ground-Water Treatment System is located at the east central portion of the facility, just east of Building No. 77. Ground water enters two 24-inch-diameter sumps extending through the backfill of the UST excavation area. Ground water is pumped, over timed intervals at about 1 gallon per minute, to a carbon adsorption unit and then to a collection tank. The tank is aboveground, consists of high-grade steel, and has a capacity of 7,000 gallons (see Photograph No. 10).

When the tank is about 75 percent full, the collected ground-water is analyzed for TCE. If the TCE level is below 50 ppb, the water is discharged to the Fostoria sanitary sewer. TCE levels have consistently been below 50 ppb, and the city has had no problems with the discharge from the tank. If the level is ever above 50 ppm, the water will be removed from the facility by bulk for treatment.

Date of Startup:

The system began operating in 1989.

Date of Closure:

The unit is active.

Wastes Managed:

The system is used to accumulate TCE-contaminated ground water.

Release Controls:

The collection tank is above ground and consists of high-grade steel. The treatment system and the tank are monitored regularly.

History of Documented Releases:

No releases from the unit have been documented.

Observations:

During the VSI, the unit appeared to be in sound condition and that tank was about 50 percent full. No spilled material was noted around the tank.

SWMU 9**Old Drum Storage Area**

Unit Description: The Old Drum Storage Area was located at the southeastern corner of the facility, just south of the Tank Field (AOC 3). The area consisted of an uncovered gravel pad, measuring about 1 acre. UC used the unit to store various drummed waste. The facility representative had little information concerning this SWMU.

Date of Startup: It is not known when the unit was first used.

Date of Closure: The facility representative did not know when UC stopped using the unit; however, UC began using the Former Hazardous Waste Storage Area (SWMU 7) in 1980. UC's contractor, O.H. Materials, Inc., partially remediated the unit in 1983 (NECC, 1992). NECC could not provide details of the remediation.

Wastes Managed: The facility representative believes that wastes stored in the unit were similar to those now stored in SWMU 3, including waste solvents (halogenated and nonhalogenated) and lead-contaminated carbon dust (NECC, 1992).

Release Controls: The unit apparently had no release controls.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit consists of leveled, mixed grass and gravel.

4.0 AREAS OF CONCERN

PRC identified six AOCs during the PA/VSI. These AOCs are discussed below; their locations are shown in Figure 2.

AOC 1 Building Nos. 72 and 77 Spill Area

As detailed in Section 2.4, in February 1985, about 600 gallons of TCE were spilled during the filling of an 8,000-gallon UST. The UST was located at the west-central portion of the facility, between Building Nos. 72 and 77 (see Photograph No. 11). About 200 to 300 gallons of TCE were recovered; the remainder percolated into the surrounding soils. In 1986, OEPA approved an investigative plan, and NECC's contractor, Gleason, excavated the contaminated soil and removed the UST (B&W, 1991).

In 1989, a ground-water recovery system was installed, consisting of two 24-inch-diameter sumps extending through the backfill of the UST excavation area.

An expansion of the ground-water recovery system is set for completion by November 1, 1992. The system will not only further address AOC 1, but will collect and contain contaminated ground water at the Former Hazardous Waste Storage Area (SWMU 7). OEPA requires the latter as part of landfill closure and post-closure activities for SWMU 7.

OEPA is skeptical that expanding the recovery system will adequately collect contaminated ground water from the two areas. After the system is installed, quarterly ground-water samples will be collected from nearby monitoring wells to assess the system's performance. OEPA DGW will review the sampling results and dictate further action at the facility.

AOC 2 Building No. 4 Spill Area

As detailed in Section 2.4, during the investigation of the TCE spill at AOC 1, another area of ground-water contamination was discovered near Building No. 4, at the southwestern portion of the facility. Ground-water monitoring wells installed in the area indicate that the primary contaminant is DCA.

Four ground-water recovery sumps will be installed near Building No. 4 by November 1, 1992. Ground water will be sampled quarterly to assess the

system's performance. OEPA DGW will review the sampling results and dictate further action at the facility.

AOC 3

Tank Field

The Tank Field is located at the far eastern portion of the facility. It consists of two aboveground tank areas and a central pumping station. Both tank areas are surrounded by separate 3- to 4-foot earthen berms and contain a total of 18 tanks, which range in capacity from about 8,000 gallons to 25,000 gallons. The area also contains several aboveground transfer tanks with capacities of a few hundred gallons. The facility representative could supply little historical information concerning the tanks.

The tanks in the northern portion of the field were installed about 1930. Over the years, the tanks stored various grades of raw materials used at UC, including liquid coal tars, and cutting and other oils. UC stopped using the tanks in 1985. During the VSI, PRC noted evidence of releases from the tanks, including visible tar-like residue on the sides of the tanks (see Photograph Nos. 12 and 13). Small stains were present on the gravel area surrounding the tanks.

The tanks in the southern portion of the field were installed in the early 1970s as a result of the Organization of Petroleum Exporting Countries (OPEC) oil embargo (see Photograph No. 14). The tanks were used solely to store fuel oil. In 1981, the tanks were emptied and have not been used since. During the VSI, PRC noted a few small stains on the gravel area surrounding the tanks.

AOC 4

Fuel Oil UST

Two 25,000-gallon USTs installed during the mid-1970s are located at the southern portion of the facility, just southwest of Building No. 17H. One tank is used for fuel oil storage, the other for water storage. The facility representative could not provide documented tightness tests for the fuel oil UST.

AOC 5

Excavated TCE USTs

In addition to the TCE UST removed between Building Nos. 72 and 77 (AOC 1), three other TCE USTs have been removed from the facility. Installation dates for the tanks are not known. In 1982, two 150-gallon TCE tanks were excavated from the southwest portion of the facility, inside Building No. 6. Also in 1982, a

2,500-gallon TCE tank was excavated from the southwest portion of the facility, just southwest of Building No. 2 (OEPA, 1985).

The facility representative could supply no information concerning the tank excavations.

AOC 6

NECC Facility

The NECC facility covers about 46 acres and has been in operation since the late 1800s. It has expanded over the years; however, carbon and glass have always been the primary manufacturing products. The facility representative could supply little information concerning the facility's early years of operation or waste management practices before 1980.

Because former operations were similar to those of today, PRC believes that former wastes were similar to those generated today, including waste halogenated and nonhalogenated solvents. Given waste management practices in the U.S. during most of this century, hazardous releases from unidentified sources at the facility may have occurred and may be continuing.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified nine SWMUs and six AOCs at the NECC facility. Background information on the facility's location; operations; waste generating processes and waste management practices; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. AOCs are discussed in Section 4.0. Following are PRC's conclusions and recommendations for each SWMU and AOC. Table 3, at the end of this section, summarizes the SWMUs and AOCs at the facility and the recommended further actions.

SWMU 1 Satellite Accumulation Areas

Conclusions: Satellite accumulation areas at the facility are indoors, well contained, and monitored regularly. Units observed during the VSI were in sound condition, and no spills or stains were noted. The potential for release to ground water, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action at this time.

SWMU 2 Baghouses

Conclusions: NECC has about 23 baghouses used mainly to collect nonhazardous carbon dust particles from various processes throughout the facility. PRC observed about 15 baghouses, including one baghouse used to collect lead-contaminated dust. The units appeared to be well maintained, and no spilled or leaking dust was noted. The potential for release to ground water, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action at this time.

SWMU 3 Hazardous Waste Storage Area

Conclusions: The Hazardous Waste Storage Area is fully enclosed and has an epoxy-sealed concrete floor. The floor is surrounded by an 8-inch concrete berm containing a vehicle ramp. Because of adequate containment, the potential for release from the unit to ground water, surface water, air, and on-site soils is low.

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Recommendations: PRC recommends no further action at this time.

SWMU 4 Empty Drum Storage Area

Conclusions: The Empty Drum Storage Area consists of an uncovered, unbermed concrete pad. The concrete pad is deteriorating severely and contains several large cracks. During the VSI, PRC noted about 100 empty drums in the area, and a number of drums were lying on their side. Despite efforts to properly empty and rinse the drums, chemicals could leak. NECC has had difficulty finding a company to remove the drums. The potential for release to environmental media is summarized below.

Ground Water and On-Site Soils: The potential is low to moderate. Hazardous chemicals leaking from the drums could contaminate soils beneath the concrete pad and eventually reach the water table.

Surface Water: The potential is low. There are no drains within 100 feet of the unit.

Air: The potential is low. Because any hazardous chemicals present in the drums would be minimal, releases to air would be negligible.

Recommendations: NECC should provide an adequate containment area for empty drums.

SWMU 5 Waste Oil Storage Area

Conclusions: The Waste Oil Storage Area is an unbermed, undefined portion of a warehouse. The concrete floor of the warehouse is cracked in spots. During the VSI, the drums were arranged randomly and most had oil residue on their tops. The potential for release to environmental media is summarized below.

Ground Water and On-Site Soils: The potential is low to moderate. Oils leaking from the drums could contaminate soils beneath the warehouse and eventually reach the water table.

Surface Water: The potential is low. There are no storm water drains within 100 feet of the unit.

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Air: The potential is low. Because of the low volatility of the wastes, releases to air would be negligible.

Recommendations: NECC should provide an adequate containment area for the materials.

SWMU 6 Debris Collection Area

Conclusions: The Debris Collection Area is used for the collection and temporary storage of various grades of materials, including nonhazardous waste carbon, nonhazardous scrap metal, and unusable drums. Drums that are not fully emptied before being placed in the unit could release hazardous constituents. The potential for release to environmental media is summarized below.

Ground Water and On-Site Soils: The potential is low to moderate. Hazardous chemicals leaking from the drums could contaminate soils underlying the concrete pad and eventually reach the water table.

Surface Water: The potential is low. There are no surface water drains within 100 feet of the unit.

Air: The potential is low. Because any hazardous chemicals in the drums, would be minimal, releases to air would be negligible.

Recommendations: NECC should provide an adequate containment area for empty drums.

SWMU 7 Former Hazardous Waste Storage Area

Conclusions: Releases of TCE from the unit have been detected in soils and ground water. NECC has proposed landfill closure and post-closure care for the unit, including ground-water monitoring and an expanded ground-water recovery system. OEPA is skeptical that the expanded recovery system will be adequate. After the system is installed, ground water will be sampled quarterly to assess the system's performance. OEPA DGW will review the sampling results and dictate further action at the facility.

Recommendations: PRC recommends that remediation continue and that OEPA continue to review monitoring reports of future sampling.

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SWMU 8

Ground-Water Collection Tank

Conclusions: The Ground-Water Collection Tank is aboveground, consists of high-grade steel, and has a capacity of 7,000 gallons. NECC monitors the tank regularly. PRC noted no evidence of leaks during the VSI. The potential for release to ground water, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action at this time.

SWMU 9

Old Drum Storage Area

Conclusions: The Old Drum Storage Area was used for waste storage for an undetermined amount of time. The unit had no release controls, and the types of waste stored in the unit are not known. Partial remediation was performed in 1983; however, NECC could not provide details of remediation activities. The potential for release to environmental media is summarized below.

Ground Water and On-Site Soils: The potential is high. Because the unit was used for an undetermined amount of time and had no release controls, releases to on-site soils and ground water are likely to have occurred.

Surface Water: The potential is low. There are no storm water drains within 100 feet of the unit.

Air: The potential is low. Because possible contamination would have migrated into lower soils by now, air releases would be negligible.

Recommendations: PRC recommends that the facility determine what remediation was performed in 1983. Soil and ground water should be sampled in the vicinity of the unit. Because of the wide range of materials that may have been used over the years at the facility, samples should be analyzed for all hazardous constituents.

AOC 1

Building Nos. 72 and 77 Spill Area

Conclusions: The ground-water recovery system is being expanded to further address the ground-water contamination in this area. This expansion should be

complete by November 1, 1992. The expanded system will not only further address AOC 1 but will collect and contain contaminated ground-water at the Former Hazardous Waste Storage Area (SWMU 7). OEPA is skeptical that the expanded recovery system will be adequate collect contaminated ground-water from the two areas. Ground-water monitoring wells in the area will be sampled quarterly to assess the system's performance. OEPA DGW will review the sampling results and dictate further action at the facility.

The potential for the area to release to surface water and air is low because the contaminants are below ground.

Recommendations: PRC recommends that remediation continue and that OEPA continue to review monitoring reports of future sampling.

AOC 2 Building No. 4 Spill Area

Conclusions: Four ground-water recovery sumps will be installed in the vicinity of Building No. 4 by November 1, 1992. After the system is installed, ground water will be sampled quarterly to assess the system's performance. OEPA DGW will review the sampling results and dictate further action at the facility.

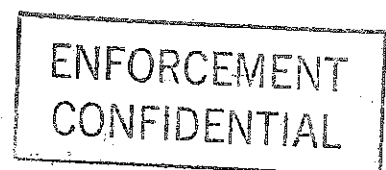
The potential for the area to release to surface water and air is low because the contaminants are below ground.

Recommendations: PRC recommends that remediation continue and that OEPA continue to review monitoring reports of future sampling.

AOC 3 Tank Field

Conclusions: The tanks in the northern portion of the field were installed about 1930 and were used until 1985 to store various grades of raw materials used at UC. Visible tar-like residue is on the sides of several tanks, and the gravel surrounding the tanks is stained. PRC believes that, because of the extended use of the tanks, releases other than the residue noted have probably occurred. PRC also noted small stains on the gravel surrounding the tanks at the southern portion of the field.

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The potential for the area to release to surface water and air is low. On-site soils and ground-water contamination are the primary concerns.

Recommendations: PRC recommends soil and ground-water sampling in and around the tank field. An investigation should concentrate on the tanks at the northern portion of the field; however, the tanks at the southern portion should also be investigated. Because of the wide range of materials that may have been used at the facility, samples should be analyzed for hazardous waste constituents.

AOC 4 Fuel Oil UST

Conclusions: The Fuel Oil UST was installed in the mid-1970s. NECC could not provide documented tightness tests. The potential for releases to environmental media is summarized below.

Ground Water and On-Site Soils: The potential is low to moderate. Because unit's age, releases to soil and ground water are possible.

Surface Water: The potential is low because the tank is below ground.

Air: The potential is low because of the low volatility of fuel oil.

Recommendations: PRC recommends that a tightness test be performed on the tank.

AOC 5 Excavated TCE USTs

Conclusions: Installation dates of the tanks are not known. No documentation concerning the removal of the tanks is available. The potential for release to environmental media is summarized below.

Ground Water and On-Site Soils: The potential is low to moderate. Because the installation dates are unknown, releases to on-site soils and ground water may have occurred.

Surface Water: The potential is low because the tanks were below ground.

Air: The potential is low. Any releases would by now probably be trapped in soils and ground water.

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Recommendations: Several ground-water monitoring wells have been installed as part of the Building No. 4 investigation. PRC recommends continued ground-water sampling in the vicinity of No. Building 4 to determine if a source of TCE is present.

AOC 6 NECC Facility

Conclusions: Releases to ground water have been documented in three separate areas at the facility. OEPA is closely following remedial activities concerning these areas. Because of the facility's size and age, and because of past waste management practices in the U.S., releases may have occurred and continue to occur from other, unidentified sources.

Recommendations: PRC recommends that area residential users of ground water be identified and that their wells be sampled for TAL and TCL parameters. If contamination is detected, residents should be switched to city water.

The facility's history and past waste management practices should be further investigated. Aerial photographs, newspaper articles, and facility reports should be reviewed; past employees should be interviewed. An effort of this magnitude is beyond the scope of a PA/VSI. This PA/VSI supplies recommendations for identified AOCs at the facility. Further sampling and analysis may be required in presently unidentified areas of the facility.

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SWMU AND AOC SUMMARY

<u>SWMU</u>	<u>Dates of Operation</u>	<u>Evidence of Release</u>	<u>Recommended Further Action</u>
1. Satellite Accumulation Areas	Early 1970s to present	None	None
2. Baghouses	Early 1960s to present	None	None
3. Hazardous Waste Storage Area	Late 1980s to present	None	None
4. Empty Drum Storage Area	1980 to present	None	Provide adequate containment.
5. Waste Oil Storage Area	Late 1980s to present	Minor oil stains were noted on the concrete floor.	Provide adequate containment for empty drums.
6. Debris Collection Area	Mid-1970s to present	None	Provide adequate containment for empty drums.
7. Former Hazardous Waste Storage Area	1980 to 1989	TCE contamination has been identified in on-site soils and ground water.	Continue remediation; OEPA should continue to review monitoring reports of future sampling.
8. Ground-Water Collection Tank	1989 to present	None	None
9. Old Drum Storage Area	Unknown to early 1980s	None	Perform soil and ground-water sampling in the area. Analyses should be for TAL and TCL parameters.

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TABLE 3 (continued)
SWMU AND AOC SUMMARYENFORCE: ENT
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<u>AOC</u>	<u>Dates of Operation</u>	<u>Evidence of Release</u>	<u>Recommended Further Action</u>
1. Building Nos. 72 and 77 Spill Area	1985 to present	TCE contamination of on-site soils and ground-water.	Continue remediation; OEPA should continue to review monitoring reports of future sampling.
2. Building No. 4 Spill Area	1988 to present	DCA contamination of soil and ground-water	Continue remediation; OEPA should continue to review monitoring reports of future sampling.
3. Tank Field	1930 to 1985	Tar-like residue on sides of tanks.	Perform soil and ground-water sampling in the area. Analyses should be for TAL and TCL parameters.
4. Fuel Oil UST	Mid-1970s to present	None	Perform tightness test on tank.
5. Excavated TCE USTs	Unknown to 1982	None	Continue sampling of monitoring wells in the vicinity to determine if a TCE source is present.
6. NECC Facility	Late 1800s to present	Soil and ground-water contamination has been identified in three areas of the facility.	Sample residential wells to the northeast of the facility. Further investigate history and past waste management practices.

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ATTACHMENT A
EPA PRELIMINARY ASSESSMENT FORM 2070-12



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE

02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☒ A. SOLID ☐ E. SLURRY
☐ B. POWDER, FINES ☒ F. LIQUID
☐ C. SLUDGE ☐ G. GAS

☐ D. OTHER _____
(Specify)

02 WASTE QUANTITY AT SITE
(Measures of waste quantities
must be independent)

TON _____

CUBIC YARDS _____

NO. OF DRUMS 21

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC ☒ H. IGNITABLE
☐ B. CORROSIVE ☐ I. HIGHLY VOLATILE
☐ C. RADIOACTIVE ☐ J. EXPLOSIVE
☐ D. PERSISTENT ☐ K. REACTIVE
☐ E. SOLUBLE ☐ L. INCOMPATIBLE
☐ F. INFECTIOUS ☐ M. NOT APPLICABLE
☐ G. INFLAMMABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	20	55-gallon drums	
SOL	SOLVENTS	1	55-gallon drum	
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
F001	Waste trichloroethylene (TCE)		drums/reclaimed		
D040	TCE-contaminated debris		drums/landfilled		
D001	Waste acetone		drums/reclaimed		
F003	Waste xylene		drums/reclaimed		
F005	Waste toluene		drums/reclaimed		
D001	Waste furfural alcohol		drums/reclaimed		
D002	Waste diethyl sulfate		drums/landfilled		
D001, D039	Waste petroleum naptha		off-site		
D040	TCE-contaminated ground-water filter media		drums/incinerated		
D008	Lead-contaminated carbon dust		drums/landfilled		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references; e.g., state files, sample analysis, reports)

EPA Region 5 and OEPA files, ODNR, USGS, USDA



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE

02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION 02 ☒ OBSERVED (DATE: 02/ /85) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 400 04 NARRATIVE DESCRIPTION

Ground-water contamination has been detected at three areas of the facility and is suspected in other locations.

01 ☐ B. SURFACE WATER CONTAMINATION 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION

None

01 ☐ C. CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION

None

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION

None

01 ☒ E. DIRECT CONTACT 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 190 04 NARRATIVE DESCRIPTION

The facility is completely fenced and has 24-hour security. Employees can come in contact with contaminated materials.

01 ☒ F. CONTAMINATION OF SOIL 02 ☒ OBSERVED (DATE: 02/ /85) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 46 (Acres) 04 NARRATIVE DESCRIPTION

Soil contamination has been documented in three areas at the facility. Other areas are suspected.

01 ☒ G. DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 400 04 NARRATIVE DESCRIPTION

Ground water is used locally as a drinking water source.

01 ☒ H. WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 190 04 NARRATIVE DESCRIPTION

See Part F.

01 ☒ I. POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 15,000 04 NARRATIVE DESCRIPTION

See Parts A, F, and G.



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE

02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None observed.

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None observed.

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None observed.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES
03 POPULATION POTENTIALLY AFFECTED: 15,000

02 ☒ OBSERVED (DATE: 02/ /85)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

See Part F.

01 ☐ N. DAMAGE TO OFF-SITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None observed.

01 ☐ O. CONTAMINATION OF SEWERS, DRAINS, WWTPS
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None observed.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 15,000

IV. COMMENTS

None

V. SOURCES OF INFORMATION (Cite specific references; e.g., state files, sample analysis, reports)

See Part 2, Section 5.

ATTACHMENT B
VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

National Electrical Carbon Corporation
(formerly Union Carbide, Inc.)
200 North Town Street
Fostoria, Ohio
OHD 004 167 219

Date: June 15, 1992

Primary Facility Representative: Michael Wentzel, Manager of Health, Safety, and Environmental Affairs

Representative Telephone No.: (419) 436-5923

Inspection Team: Pete Zelinskas, PRC Environmental Management, Inc.

Photographer: Pete Zelinskas

Weather Conditions: Sunny and breezy, about 78°F

Summary of Activities: The visual site inspection (VSI) began at 1:30 p.m. with an introductory meeting. The inspector explained the purpose of the VSI and the agenda for the visit. Mr. Wentzel then discussed the facility's past and current operations, solid wastes generated, and release history. He provided the inspector with copies of requested documents, a written description of waste management at the facility, and a facility map.

The VSI tour began at 2:20 p.m. The inspector examined waste generating processes and waste management units, reviewed areas of remediation, and identified AOCs.

The tour concluded at 4:30 p.m, after which the inspector held an exit meeting with Mr. Wentzel. The VSI was completed and the inspector left the facility at 4:45 p.m.



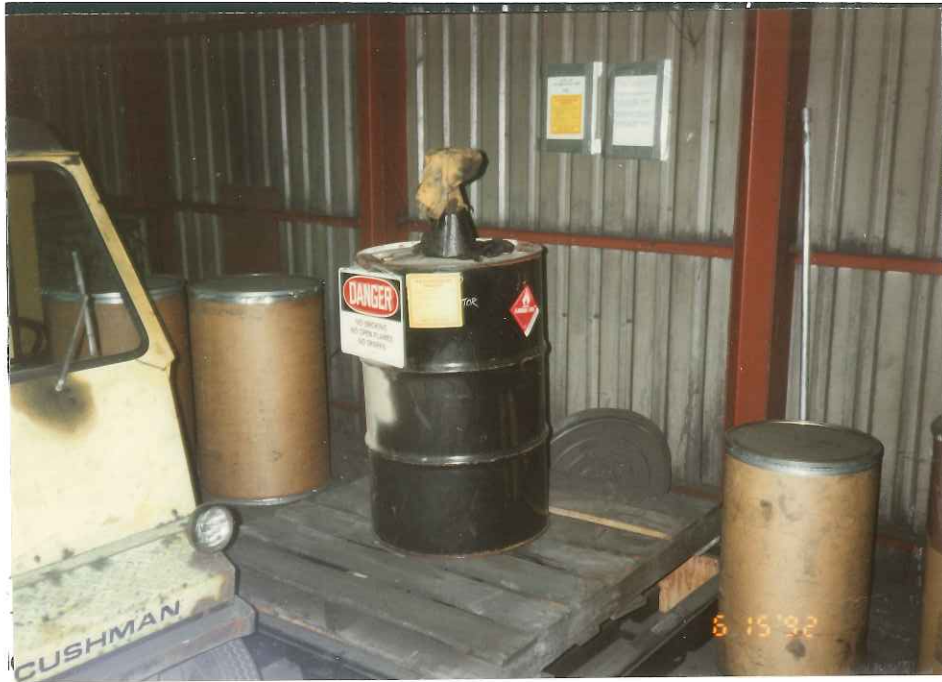
Photograph No. 11
 Orientation: Southeast
 Description: The ground-water collection sumps at AOC 1.

Location: AOC 1
 Date: 06/15/92



Photograph No. 12
 Orientation: North
 Description: Aboveground storage tanks of the northern portion of the Tank Field. Note the chemical residue on the side of the tank in the center of the photograph.

Location: AOC 3
 Date: 06/15/92



Photograph No. 1
 Orientation: Northeast
 Description: A Satellite Accumulation Area.

Location: SWMU 1
 Date: 06/15/92



Photograph No. 2
 Orientation: South
 Description: A Satellite Accumulation Area.

Location: SWMU 1
 Date: 06/15/92



Photograph No. 3
 Orientation: East
 Description: A typical baghouse at the NECC facility.

Location: SWMU 2
 Date: 06/15/92



Photograph No. 4
 Orientation: Southwest
 Description: The hazardous waste containment area of SWMU 3.

Location: SWMU 3
 Date: 06/15/92



Photograph No. 5

Orientation: Northwest

Location: SWMU 4

Date: 06/15/92

Description: The empty drum storage area of SWMU 3. Note the deterioration of the concrete base. Bags of waste baghouse dust can be seen in the background.



Photograph No. 6

Orientation: Northwest

Location: SWMU 5

Date: 06/15/92

Description: The Waste Oil Storage Area.



Photograph No. 7

Orientation: Southwest

Location: SWMU 6

Date: 06/15/92

Description: The Debris Collection Area. The portion shown is for the collection of waste carbon materials.



Photograph No. 8

Orientation: Southeast

Location: SWMU 6

Date: 06/15/92

Description: The Debris Collection Area. The portion shown is for the collection of scrap metal and unusable drums.



Photograph No. 9
 Orientation: Northwest
 Description: The Former Hazardous Waste Storage Area.

Location: SWMU 7
 Date: 06/15/92



Photograph No. 10
 Orientation: North
 Description: The Ground-Water Collection Tank. The tank on the right is the 8,000-gallon tank excavated from between Building Nos. 72 and 77.

Location: SWMU 8
 Date: 06/15/92



Photograph No. 13

Orientation: West

Description: An aboveground tank at the rear of the pumping station. Note the residue on the side of the tank.

Location: AOC 3
Date: 06/15/92



Photograph No. 14

Orientation: Southeast

Description: Aboveground storage tanks of the southern portion of the Tank Field.

Location: AOC 3
Date: 06/15/92

ATTACHMENT C
VISUAL SITE INSPECTION FIELD NOTES

34

6-15-92

VSI for National Electrical
Carbon Corp. (formally
Union Carbide) Fosteria, OH
CND 064 167 219

Site Contact: Mike Wentzel

Conditions: Sunny, breezy $\approx 78^{\circ}$

1330 History -
Early
Late 1890s

Glass manufacturing - lighting
 ≈ 1977 Union Carbide
Went into lighting industry.
Carbon and graphite manu-
facturing.

* White up provided by Mr.
Wentzel. Quite complete
Removed soil from tank
area! ≈ 15 feet down
46 acres now. Was
about 70

Edith. February 6-15-92

35

* Waste generating

See Sheet.

Summary - Met all

1. Teacher. Satellite,

2. Urban Dots, Bingham

{ 24-hour security, totally
fenced.

3. Satellite Area

4. Haz Waste Site Area

5. CW Treatment System

6. Waste Area

* City Water - Have Res.

Portage River and deep
wells.

Have a few industrial

wells on-site. One ground
water because its is

colder. Screened at 2250'

Monitoring wells all over.

Edith. February 6-15-92

36

1420 #1, 2 lead dust ~ 20-25 collars

190 employees 3 shifts

most lost

3, 4 waste drums

5 oil waste

Cosmo Waste Control,
Tulsa, OK

Ne. Containment Bld. 2E

~ 25 drums

* Haz waste storage area

Indoors 3 inch berm

Sealed ramp

Collection dump 2012

* Drum Storage Area - Empty

Crushed No. 200

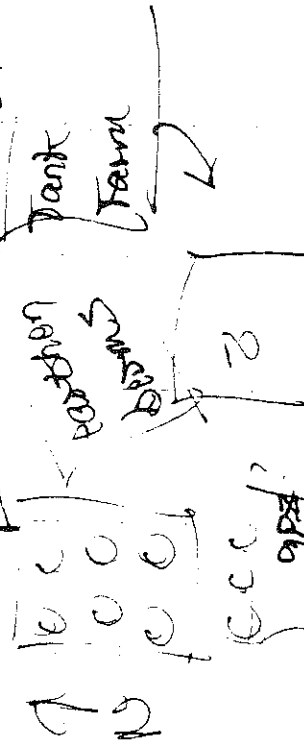
Restored Cars find someone
to take them. Needs work.

* 3-4th Storage tanks

67, 9 photos

John C. Zimmerman 6-15-92

1920s



Engsted tanks in 1981
~ installed early 1970s

~ 8,000 ~ 20,000 gal. have stopped

~ 4 tanks

leaking all.

Quite messy.

Top oil / no material.

Tanks were heated.

* Debris Collection Area

General Landfill, Ditch

Waste carbon

* Waste metal, debris

Cans, various metal

parts, crushed + removed.

John C. Zimmerman 6-15-92

38

* Retention Tanks for #8
treated ground water
7,000 gal. tank removed
#10 old tank area

See file

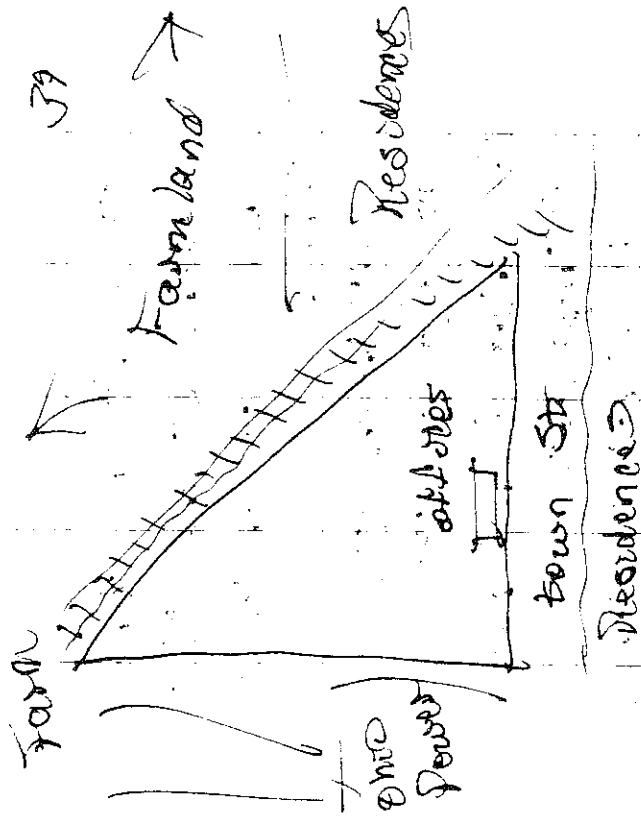
* Satellite from solid
DUR, Both solid & liquid
Containment around liquid
concrete under block berm.

#9

* Closed box Waste Site
Area #11

1630 Meeting with Mr. Wentzel
to fill in map.
Moved industrial/residential
neighborhood. Very active.

Edw. R. Johnson 6-15-93



1645 visit complete

6-15-93 Edw. R. Johnson



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRE-8J

June 9, 1992

Mr. Mike Wentzel
National Electrical Carbon Corporation
(formerly Union Carbide Corporation)
200 North Town Street
Fostoria, OH 44830

Re: Visual Site Inspection
National Electrical Carbon Corporation
(formerly Union Carbide Corporation)
Fostoria, OH 44830
ID No. OHD 004 167 219

Dear Mr. Wentzel:

The United States Environmental Protection Agency (U.S. EPA) Region V will conduct a Preliminary Assessment including a Visual Site Inspection (PA/VSI) at the referenced facility. This inspection is conducted pursuant to the Resource Conservation and Recovery Act, as amended (RCRA) Section 3007 and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA) Section 104(e). The referenced facility has generated, treated, stored, or disposed of hazardous waste subject to RCRA. The PA/VSI requires identification and systematic review of all solid waste streams at the facility. The objective of the PA/VSI is to determine whether or not releases of hazardous wastes or hazardous constituents have occurred or are occurring at the facility which may require further investigation. This analysis will also provide information to establish priorities for addressing any confirmed releases.

The visual site inspection of your facility is to verify the location of all solid waste management units (SWMUs) and areas of concern (AOCs) to make a cursory determination of their condition by visual observation. The definitions of SWMUs and AOCs are included in Attachment I. The VSI supplements and updates data gathered during a preliminary file review. During this site inspection, no samples will be taken. A sampling visit to ascertain if releases of hazardous waste or constituents have occurred may be required at a later date.

Assistance of some of your personnel may be required in reviewing solid waste flow(s) or previous disposal practices. The site inspection is to provide a technical understanding of the present and past waste flows and handling, treatment, storage, and disposal practices. Photographs of the facility are necessary to document the condition of the units at the facility and the waste management practices used.

The VSI has been scheduled for the afternoon of June 15, 1992. The inspection team will consist of Pete Zelinkas and someone else from PRC Environmental Management, Inc., a contractor for

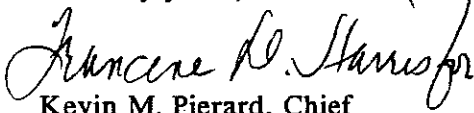
Mr. Mike Wentzel
June 9, 1992
Page 2

the U.S. EPA. Representatives of the Ohio Environmental Protection Agency (OEPA) may also be present. Your cooperation in admitting and assisting them while on site is appreciated.

The U.S. EPA recommends that personnel who are familiar with present and past manufacturing and waste management activities be available during the VSI. Access to any relevant maps, diagrams, hydrogeologic reports, environmental assessment reports, sampling data sheets, environmental permits (air, NPDES), manifests and/or correspondence is also necessary, as such information is needed to complete the PA/VSI.

If you have any questions, please contact me at (312) 886-4448 or Francene Harris at (312) 886-2884. A copy of the Preliminary Assessment/Visual Site Inspection Report, excluding the conclusions and Executive Summary portion will be sent when the report is available.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Kevin M. Pierard".

Kevin M. Pierard, Chief
OH/MN Technical Enforcement Section

Enclosure

cc: Phil Williams, OEPA Northwest District Office
Ed Lim, OEPA Central Office

ATTACHMENT I

The definitions of solid waste management unit (SWMU) and area of concern (AOC) are as follows:

A SWMU is defined as any discernable unit where solid wastes have been placed at any time from which hazardous constituents might migrate, regardless of whether the unit was intended for the management of a solid or hazardous waste.

The SWMU definition includes the following:

- RCRA regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that U.S. Environmental Protection Agency has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents, such as wood preservative treatment dripping areas, loading or unloading areas, or solvent washing areas

An AOC is defined as any area where a release to the environment of hazardous wastes or constituents has occurred or is suspected to have occurred on a nonroutine or nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

PRC requests that, if available, the following facility information be provided during the VSI:

1. Two copies of a detailed map of the facility
2. Facility history, including dates of operation, ownership changes, and production processes
3. Current facility operations
4. Processes that generate waste that is treated, stored, or disposed of at the facility
5. Records of disposal of wastes generated at the facility (manifests, annual reports, etc...)
6. Security at the facility
7. Information regarding geology and the uses of ground water and surface water in the area
8. Permits (air, NPDES, etc...) the facility currently holds or has held in the past and documentation of any permit violations that may have occurred
9. Records of any spills that may have occurred at the facility
10. Descriptive operational information (location, dimensions, capacity, materials of construction, etc...), dates of start-up and closure, wastes managed, release controls, and release history for each SWMU

REMEDIAL ACTIVITIES
HAZARDOUS WASTE STORAGE AREA
NATIONAL ELECTRICAL CARBON
FOSTORIA, OHIO
PROJECT # NECUCC FOOH 005

The following report summarizes the activities to date and our recommendations concerning the Hazardous Waste Storage (HWS) pad closure at the National Electric Carbon (NEC) facility in Fostoria, Ohio. At the direction of Mike Wentzel, T A Gleason Associates (TAGA) performed sampling activities as summarized below in the area of the HWS pad during cleaning operations on November 29, 1988. The results of this sampling and TAGA recommendations for further remediation are also presented for review and comments.

Cleaning and sampling activities were conducted on November 29, 1988 and proceeded as follows:

The closure plan was discussed and reviewed by representatives of NEC, T A Gleason Associates and Ohio EPA officials in NEC's conference room.

Outdoor work began with the removal of hazardous waste drums from the HWS concrete pad. (see Figure 1)

The concrete pad was then cleaned of soil and associated debris using a push broom. This debris was sampled, then placed into plastic garbage bags and stored inside 55 gallon steel drums. The disposition of this debris is dependent on laboratory results from Aqua Tech Environmental Consultants, Melmore and Marion, Ohio.

Further cleaning of the concrete pad floor was accomplished with a mixture of water and soap. The cleaning solution was worked into the pores of the concrete floor with a stiff bristle push broom. Afterward, the cleaning solution was rinsed from the floor and drained toward the NE corner of the HWS pad. The wash and rinse water was contained inside the HWS pad by a permanent retaining wall 8" in height and constructed of concrete blocks. The entire concrete pad was rinsed with city water using a pressure nozzle attached to a (5/8") rubber hose.

The wash and rinse water drained through a pipe below the concrete floor grade, and was pumped to two 55 gallon steel drums for storage. A diaphragm pump working on compressed air moved the liquid to the drums. Each drum was labeled (#1 and #2) and contained approximately 18 gallons, and 27 gallons respectively. Samples of the liquid were collected and delivered to Aqua Tech for analysis. Disposition of this liquid awaits laboratory results from Aqua Tech.

After thoroughly cleaning the concrete pad, sampling and securing waste materials, Karl Curry was informed by M. Wentzel that the Ohio EPA officials were satisfied with the cleaning of the HWS pad.

Soil sampling was conducted during the course of activities described above. Karl Curry discussed the soil sampling plan with NEC's M. Wentzel and OEPA officials. Karl Curry suggested, in addition to 4 sampling points near the HWS pad as described in NEC's Closure Plan, that an additional control sample be collected from a location approximately 100 yards from the HWS pad. Both M. Wentzel and OEPA approved. Both parties also agreed with the sampling method and procedure; i.e., a standard 6 inch diameter soil auger and sampling the upper 6 inches of soil. Table 1 presents a summary of samples collected during these activities.

RESULTS AND RECOMMENDATIONS

The analytical results from the November 29 sampling are presented in Tables 2 through 7 and on Figure 1. These results indicate that Volatile Organic Compounds, ranging from .012 ppm at the control location S-1 to a high of 224 ppm at sample location S-5, are present to a depth of at least 6 inches and that some RCRA listed metals are also present. Based on these results, and the review of the surface drainage patterns in the area of the HWS pad, TAGA recommends the following remedial actions to effect final closure of the HWS pad.

RECOMMENDED REMEDIAL ACTIONS

TAGA recommends soil excavation in the area shown on Figure 2 to a depth of approximately 1 ft. The excavated soil will be placed in roll-off boxes and composite samples of each roll-off box will then be analyzed to determine disposal criteria. Additionally, exit samples will be collected at the base of the excavated area at selected points to be analyzed to ascertain that all contaminated materials have been removed. During

excavation and sampling, an HNU Photo Ionization Detector will be used to "screen" the excavated area to indicate that the 1 ft level is "clean". The laboratory results will then be used to confirm this.

If the HNU screening in any area indicates that additional VOC is present at the 1 ft level then deeper excavation, sampling, and screening will take place in those areas until reasonably certain that all contaminated materials have been removed. Again this will be confirmed by laboratory analysis. The excavated area will then be backfilled with "clean" soil.

DISPOSAL OF EXCAVATED SOILS

Assuming that the 1 ft excavation depth would be sufficient to remove the contaminated soil, we estimate approximately 35 cubic yards of material (2 ft roll-offs) from the proposed area. Disposal criteria for this soil will be dependent on laboratory results from the sampling of the roll-offs.

TABLE 1

<u>SAMPLE NO.</u>	<u>LOCATION/SOURCE</u>	<u>DEPTH</u>	<u>ANALYSIS</u>
S-1	See Figure 1	0-6 in.	1,2,3,4*
S-2	See Figure 1	0-6 in.	1,2,3,4*
S-3	See Figure 1	0-6 in.	1,2,3,4*
S-4	See Figure 1	0-6 in.	1,2,3,4*
S-5	See Figure 1	0-6 in.	1,2,3,4*
D-1	Rinseate Water Drum #1	N/A	1,2,3,4,5*
D-2	Rinseate Water Drum #2	N/A	1,2,3,4,5*
P-1	Sweepings From 29 November Cleaning	N/A	1,2,3,4*
P-2	Sweepings From Previous Cleaning (6 months old)	N/A	1,2,3,4*

*NOTES

1 = VOC

2 = RCRA Metals

3 = Flash Point

4 = pH

5 = RCRA Metals Leachate Test

